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Medicina Gymnastica:

OR,

Every Man his Own Physician.

A

TREATISE

Concerning the

POWER of EXERCISE

With Respect to the

ANIMAL OECONOMY:

AND

The Great Necessity of it

IN THE

Cure of Several Distempers.

VIZ, THE

CONSUMPTION, DROPSY, HYPOCHONDRIA, the ITCH, and other Cutaneous Irruptions.

By FRANCIS FULLER, M. A.

The Wise for HEALTH *on* EXERCISE *depend,*
God never made his Work for Man to mend. DRYDEN.

THE SEVENTH EDITION, Improved.

LONDON:

Printed for E. CURLL, in *Rose-Street Covent-Garden*; and Sold by C. RIVINGTON, in *St. Paul's Church-Yard*; Messf. LONGMAN, HITCH, WOOD and Comp. in *Pater-Noster-Row*; and Messf. BIRT and WARE near *Amen-Corner*. 1740. Price 4 *s*.

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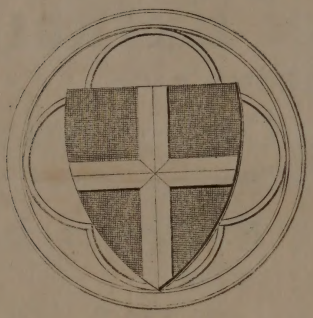

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TO THE

Duke of Richmond.

TO your GRACE, as the *Æsculapius* of the Age, being allowed the greatest Professor in the *Gymnastic Exercise*, I beg leave to make an Offering of this excellent Treatise.

THAT

DEDICATION.

THAT a long Series of Succeſs may attend your GRACE's Practice, for the Preſervation of that Life which is ſo valuable to your own NOBLE FAMILY, your KING, and your COUNTRY, is the moſt ardent Wiſh of

YOUR GRACE'S

Moſt Dutiful

Humble Servant,

E. C.

WE whoſe Names are here ſubſcribed, having peruſed this Diſcourſe, Entitled MEDICINA GYMNASTICA, &c. judge it well Worthy to be communicated to the Public.

Datum in Comitiis Cenſoriis ex Ædibus noſtri Collegii.
Feb. 2, 170$\frac{4}{5}$.

Edwardus Brown, Præſes.

Walt. Charlton,
Walt. Harris,
W. Vaughan,
Jo. Hawys,
} Cenſores.

J. Bateman, Regiſt.

PREFACE.

THE Generality of Men have, for a long Time, had too narrow Thoughts of Phyſic, as if it were in a manner only confined to little more than Internals, without allowing themſelves the Liberty of common Reaſoning, by which they eaſily might have found that the human Body is liable to, and requires ſeveral Adminiſtrations of a very different Nature, and that it is very unreaſonable to ſuppoſe, that ſince there are ſo many Ways for Diſeaſes to enter upon us, there ſhould be ſo few for Health to return by. Internals do indeed make up the far greateſt Part of the Means of Cure; but yet there are conſiderable Caſes where the very Nature of the Thing requires other Methods; and this would appear very obvious, if it were not for our too partial Conſideration of the Body of Man, by attributing too much to

the Fluids, and too little to the Solids; both which, though they have a mutual Dependance upon one another, yet have each of them ſome Properties, and if out of Order, require ſomething particular in the Application to reſtore them again. Conſent in the Solids anſwers to Mixture in the Fluids, and as an ill Ferment, as ſoon as it comes into the Blood, diffuſes and mixes itſelf with the whole Maſs, and cannot often be extirpated till the Medicine given for that End has been taken ſo long as to be diffuſed, and intimately mixed with the Blood likewiſe; ſo a violent Seizure in one of the ſolid Parts, commonly draws all the reſt into Conſent, and a particular Application to the Place primarily affected, ſhall do no good, when an univerſal one ſhall cure: And a Thing which would be trivial and vain, if uſed as a Topic, ſhall by an univerſal Adminiſtration, prove of the greateſt Importance. We ſee Contraries often prove Remedies to

one

one another in the Juices, and that Poiſons become beneficial, when oppoſed to certain Humours: Why ſhould we not then allow of the ſame Rule in the containing Parts of the Body? If by a ſupine Courſe of Life, the nervous Parts are weakened and relaxed, why ſhould we not ſuppoſe the contrary Way of Living the moſt likely to repair them? Since then the Vigour of thoſe Parts is acquired by Uſe, they are the active Part of the Man, and not always liable to the Impreſſions of the Fluids; for though you invigorate the Blood ever ſo much by the moſt generous Medicines, the Nerves may remain effete and languid notwithſtanding; but if the nervous Parts are extended and exerciſed, the Blood and the Humours muſt neceſſarily partake of the Benefit, and ſoon diſcover it by the Increaſe of their Heat and Motion. There is ſo much of a relative Nature in every Thing that can concern the Health or Diſtemperature of the Individual,

that there is ſcarce any thing ſo prejudicial, or ſeemingly abſurd, but may in different Circumſtances prove as advantageous. The World has lately had full Evidence of the good Effects of an intenſe Cold, equally applied to all the Parts of the Body at once; which Method of curing would, not many Years ago, have been thought very extravagant, and certainly deſtructive. On the contrary, there are other Caſes, where a Warm Bath is only prevalent; and though ſome People have ſuppoſed it to be only a kind of a laſt Reſort, when other Things have been tried in vain; yet it is quite otherwiſe, it being impoſſible to remove ſome Diſeaſes of the Limbs, without an univerſal equal Relaxation. Again, quite different from this is the equal Diſtribution of a greater Degree of Heat throughout the whole Body, which is procured by habitual Exerciſe: In the former Method, the Parts are relaxed; in this they are ſtrengthened, and in every

Reſpect

Reſpect the Effects are widely different, though in both Ways there is a conſiderable Increaſe of Heat. But to carry this Enquiry farther, there are ſome Diſtempers, and thoſe not altogether ſo rare neither, in the Cure of which no poſitive Phyſic, of any Sort whatſoever, can be ſerviceable; nothing but a gradual Subſtraction of the Cauſe, an alterative Abſtinence, if I may ſo ſpeak, being neceſſary; as have been ſome Gouts in ſome very temperate Perſons, of a ſtrong and rank Conſtitution, which nothing could remove but a very low Diet, and an intire Abſtinence from Fleſh; to them Fleſh being as Wine is to others, who contract that Diſtemper by their Exceſs: And the ſame Obſervation holds good likewiſe in the *Opthalmia*, and ſome other Caſes of the Eyes, as any that will duly weigh the Circumſtances of ſome Perſons often ſubject to them, will find Reaſon to believe; ſo that ſome Men are by their Conſti-

tutions condemned to an Antediluvian Diet of Roots and Vegetables, or elſe to ſuffer worſe Inconveniencies; and when thoſe happen, it is abſurd to expect, by the moſt celebrated Remedy, to cure the Diſeaſe, when the Cauſe continues. Theſe are Inſtances of ſeveral Methods, widely different from one another, and yet of abſolute Neceſſity in their particular Caſes, which ſhews us, that we ought not be ſo eager after Courſes of Pharmacy in all Caſes, without diſtinguiſhing where other Ways are more rational. It is one Thing to diſpoſe Nature to collect her own Strength, and throw off her Enemy; and it is another to aſſiſt her by the *Corpuſcula*, the minute Parts of a Medicine given inwardly: The firſt Way has Regard to to the whole Animal Oeconomy; the ſecond reſpects the Blood and Juices chiefly; the firſt may ſucceed where the ſecond cannot, becauſe here the Laws of Motion, and the Rules of the Oeconomy are inforced, and brought

brought to be assisting to a Recovery of Health, which in some few Cases cannot be effected by a private and simple Attempt upon the Blood only.

These are Notices which do not lie so far out of the Reach of any Man, that will give himself Leave to animadvert upon the Misfortunes of his Neighbours, but that they may be discerned; and if they were duly considered, there could be no Room for Empiricism, for that is founded on the Folly and Negligence of Mankind; and if Men will give themselves up to Expectation, and resolve to be always alike passive, in hopes the Miracle will be wrought upon them without any Concurrence on their Part, it is but just they should suffer something from the Pedantry, the little Things of the Profession, which they are so disposed to receive.

As for the Exercise of the Body, which is the Subject of this ensuing

Diſcourſe, if People would not think ſo ſuperficially of it, if they would but abſtract the Benefit got by it, from the Means by which it is got, they would ſet a great Value upon it: If ſome of the Advantages accruing from Exerciſe, were to be procured by any one Medicine, nothing in the World would be in more Eſteem, than that Medicine would be; but as thoſe Advantages are to be obtained another Way, and by taking ſome Pains, Men's Heads are turned to overlook and ſlight them. The habitual increaſing of the natural Heat of the Body, as I took notice above, is not to be deſpiſed; but if we conſider that it is done without charging Nature with any ſubſequent Load, it ought to be more valuable; for I may by ſome generous Medicine, or a Glaſs of Wine, raiſe Nature to a great Pitch for a Time; but then when theſe Ingredients come to be digeſted and reſolved into their Principles, Nature may be more oppreſſed with the

Remains

Remains of the Medicine, than ſhe was at firſt relieved by it. Therefore if any Drug could cauſe ſuch an Effect, as the Motion of the Body does in this Reſpect, it would be of ſingular Uſe in ſome tender Caſes upon this very Account; but then add to this the great Strength, which the muſcular and nervous Parts acquire by Exerciſes: If that could be adequately obtained likewiſe by the ſame internal Means, what a Value, what an extravagant Eſteem, would Mankind have for that Remedy, which could produce ſuch wonderful Effects? But ſince thoſe Benefits are to be procured another Way, how difficult is it to bring People to conceive it? To build up ſuch a Belief in the Minds of Men, is to raiſe a Structure, the Foundations of which can be laid with no leſs Difficulty, than the removing of the Rubbiſh of a vulgar Error.

As for what I have ſaid relating to the Balſamic Method in the Cure of Conſumptions, though I may perhaps give Offence to many, yet I am ſure I ſpeak the Thoughts of ſome of the Greateſt of the Profeſſion, if not of the Generality of Phyſicians, who have, for a great while, had a ſecret Regret at the ill Succeſs of thoſe Means, which nothing could have ſtifled and ſuppreſſed, but the Difficulty of agreeing to ſubſtitute better. This I do not pretend to do neither; this would be too daring an Enterpriſe for me; I only point out ſome few Miſtakes, which one of my little Conſideration may ſometimes diſcern in the Actions of thoſe of greater Condition. And perhaps, when theſe Miſtakes are rectified, the Buſineſs is done as well as if I had diſcovered to the World ſome wondrous Medicine, dignified with as many and as ſwelling Titles, as an *Eaſtern* Monarch; for it ſeems to me to be a great Miſtake, to wait for ſome Medicine of a great Cha-

Character, to be the Specific, or certain, or adequate Remedy of this Diſeaſe. I am inclined to think, that the Cure muſt reſult as much from ſome Circumſtances of Management, as from any Medicine. I believe we have the beſt of Medicines for this Caſe in our Hands, if we did but take Pains to obviate ſome minute Circumſtances that make thoſe Medicines often prove deficient; if the Succeſs did not vary by Reaſon of ſuch ſmall Emergencies, I do not know how we ſhall account for what we find to be true, *viz.* that ſome common and deſpicable Medicines ſhall in one Perſon produce a wonderful Cure, and in another do nothing at all, though as far as human Wiſdom can diſcern, the Caſe is exactly the ſame in both; and why ſhould it ſeem ſtrange, if this ſhould happen in Caſes ſo fine as thoſe of the Lungs, when we ſee in ſeveral Manufactures the Accuracy and Perfection of an Operation ſhall depend upon a certain *Fi-*

neſſe

neſſe, the Criterion of which is ſcarce to be deſcribed, but to be learned only by numerous Repetitions. A Man may be told the Ingredients of a Compoſition, and the Way of working them up, may ſee it done, and not be able to diſtinguiſh the Nicety of the Circumſtances, which conſpire to make the Work conſummate. Do not we know that in the Dyers Trade, (to give but one Inſtance) their Mixtures ſhall ſometimes miſcarry, and the beſt Artiſt not be able to ſhew a Reaſon for it. Now if it be thus in Matters of Artifice, I think we may with great Reaſon ſuſpect ſomething of a like Nature in ſome few Caſes of the human Body: In theſe Maladies of the Breath, there is a *Fineſſe* peculiarly diſtinguiſhed from the Circumſtances of any other Diſeaſes, as is apparent from the Power of ſo fine a Body as the Air; and therefore we need not think it ſo ſtrange, that a little Matter ſhould be able to give a good or bad Turn. And if this will

be

be allowed to be good Reaſon; what can be ſo likely to obviate ſuch Miſcarriages, as a due Application to that moſt moderate and eaſy Exerciſe which I have applied to the Cure of this Diſtemper? That a mild Exerciſe will do ſomething like this, may be learned from the Effects of thoſe which are more violent: We know very well what has followed upon going into the Bagnio after violent Exerciſes; the Blood of thoſe Perſons who have done ſo, has been ſo exalted in its Craſis, as to be upon that very Account fatally preternatural; though upon the firſt Thought, one would be apt to conclude, that ſuch violent Perſpirations ſhould rather impoveriſh the Blood; but it is quite contrary, juſt as in hot Climates, though People ſweat profuſely, yet they are rather the more brisk and lively for it. And thus moderate Exerciſe, by augmenting the natural Heat of the Body, will enrich the Fluids, and by increaſing the Velocity

of

of the Circulation, every the minuteſt Particle will be brought much oftener to the Teſt of the Strainers, than otherwiſe it would have been; ſo that both the venous Fluid and the Spirits will after an eminent Manner be exalted, and, as it were, rectified in the making. Therefore it cannot be a Doubt, that theſe Means may improve a Medicine, when it comes into the Blood, ſupply its Deficiency, and remove the inſcrutable Impediments in the Cure of ſo nice a Diſeaſe as this I am ſpeaking of.

Theſe Things are not owing to Notion and Speculation, but to Practical Obſervation, I cannot tell otherwiſe how to explain what I have ſeen to be the Effects of ſuch Means: I have ſeen a poor Gentleman at *Hamſtead*, in the moſt deplorable Extremity of a Conſumption, betake himſelf to Riding twice or thrice a Day upon his Waters, put a Stop for a Time to his Diſtemper, and keep

Death,

Death, as it were, at a Bay for ſome Weeks; which plainly ſhewed, that if he had done ſo ſooner, his former Medicines would undoubtedly have took Effect; and how ſhall I account for this, but after ſome ſuch Manner as I have here inſiſted on? This is the Sum of my Thoughts on this Caſe, and if it does not ſtrike the Imaginations of ſome People with ſo much Surpriſe, as other pharmaceutic Diſcourſes, I cannot help it; nay, if any ſhould be ſo hard upon me as to alledge, that I am quite miſtaken in the Cure of this Diſeaſe, when far advanced, let it be ſo; yet I hope they will allow me thus much, that it appears plain enough, for the Nature and Power of Exerciſe, that we ought to diſtinguiſh in this Diſtemper in like Manner as we do in another, which it would not be good Manners to mention at the ſame Time with the Conſumption of the Lungs; in which latter Caſe, if a young Debauchee happens to get a Misfortune, he does

not

not let it run on till it comes under another Denomination, but looks out for a preſent Cure, which may then be certainly obtained; and ſo I think it is no leſs obvious, if Exerciſe be as efficacious as I aſſert, that it is in our Choice whether a Cough ſhall run on to a Conſumption; that is, I underſtand, that when a Cough comes to laſt a Month, and begins to chop in its Indications, to require one while incraſſating Medicines, another while attenuating ones; I ſay, it is high Time to look out, and ſet upon a reſolute Courſe of Riding; that by a Series of Journeys, continued Day after Day without Intermiſſion, the obſtructed Perſpirations may be reſtored, which may then be eaſily effected, becauſe the Body not being then much impaired, ſo many Millions of Succuſſions coming cloſe upon one another, muſt affect both the Strainers of the whole Body, and the Juices to be ſtrained; and he who can oppoſe a Truth ſo manifeſt, muſt fly in the Face

Face of Nature, and deny the Principles of the Oeconomy.

Having had ſome Occaſion to mention the Antients, and ſince Gymnaſtick Courſes made a great Part of their Phyſick, perhaps ſome will think I am ſetting up for one of thoſe who cry up the Antients upon all Occaſions, out of pure Enmity to the Authors of Modern Diſcoveries; but they will find themſelves miſtaken: I neither affect to be of a Party in Phyſick, or Singular; I ſeldom yet knew any one, who cried up *Acids*, or cried down *Bleeding*, who extolled the *Antients* univerſally, and villified the *Moderns*, but if he really underſtood what he pretended to, had ſome By-End to ſerve in ſo doing. I owe the Antients no more Reſpect, than what is due to thoſe upon whoſe Shoulders we ſtand, and upon whoſe Rudiments we have built. We know their Ætiology was all wrong, their Pharmacy in general was rough and

barbarous. (I ſay in general, for there are ſome few Caſes in which their Medicine will perhaps laſt for ever.) But yet the Ways they took to ſupply their Want of Medicine were very commendable, and may ſhame us; their exquiſite Diligence in eſtabliſhing certain Diagnoſticks, and their Recourſe to various Exerciſes to help out what they wanted in other Means. It is the laſt of theſe which has given me occaſion to take Notice of them; and I think it will appear in the following Diſcourſe to be of ſo much Importance, that not only in their Days, but in ours alſo, the Art of Curing may be ſaid to be in ſome meaſure imperfect without it, there being ſome Caſes in which the Uſe of Exerciſes will be abſolutely neceſſary as long as Nature ſhall laſt.

I have this more to add, that I did not take this Subject out of Choice but Neceſſity: It is not owing to

to Theory and Speculation, but Experience, the ſevereſt Experience, which my own Misfortunes have given me but too much occaſion to make in a Diſtemper, which ſome Years ago I happened to be afflicted with, as I have related in the *Appendix* to this Treatiſe. It was under that ſevere Diſcipline I made moſt of the Obſervations of this Treatiſe; and though mine was an Anomalous and Singular Caſe, yet from what I perceived to be the immediate Effects of that Exerciſe in common to all, and from the Manner by which it cauſed my Diſtemper to give way, I could not but diſcern in what other Caſes it was likely to be of the ſame Conſequence; and I have had ſo very many ſerious and calm Hours to confirm me in theſe Notions, that I cannot think I have extended them too far.

As for what Reception theſe Papers are like to meet with; though I

have ventured Abroad in a Cauſe ſo obſolete, in an Age ſo fruitful in Pharmacy, and abounding in ſplendid Diſcoveries; and though I am deſtitute of a new Hypotheſis, that ſpecious Image of Truth, that Idol to which the Learned all bow down; yet, if what I have advanced be ſtrictly conformable to Truth, and of real Neceſſity in ſome few Extremities, I hope I may paſs, upon the Merits of my Subject, though without Flouriſh and Ornament.

Me-

Medicina Gymnaſtica:

OR, A

TREATISE

Concerning the

POWER of EXERCISE,

With Reſpect to the

Animal Oeconomy.

THAT the Uſe of Exerciſe does conduce very much to the Preſervation of Health, that it promotes the Digeſtion, raiſes the Spirits, refreſhes the Mind, and that it ſtrengthens and relieves the whole Man, is ſcarce diſputed by any; but that it ſhould prove Curative in ſome particular Diſtempers, and that too when ſcarce any Thing elſe will prevail, ſeems

to obtain little Credit with moſt People, who, though they will give a Phyſician the Hearing, when he recommends the frequent Uſe of Riding, or any other ſort of Exerciſe; yet at the Bottom look upon it as a forlorn Method, and the Effects rather of his Inability to relieve them, than of his Belief that there is any great Matter in what he adviſes: Thus by a negligent Diffidence, they deceive themſelves, and let ſlip the Golden Opportunities of Recovering, by a diligent Struggle, what could not be procured by the Uſe of Medicine alone.

Whether this proceeds from the Cuſtom of theſe Northern Nations, ſo different from thoſe of the Antients, and of more Southern Countries, who ſeem to have placed almoſt as much in their Methods of Exerciſe, as in the internal Phyſic; or whether from the narrow Notions moſt People have conceived of the Art of Phyſic, as if it implied little more than

than Internals only, without conſidering that External, Mechanical, and all other Means whatſoever that give Relief, properly belong to it; this I ſhall not pretend to determine: But this, I think, I may venture to affirm, That moſt Men indulge themſelves in the Expectation of more ſudden Relief, than the Nature of the Caſe will admit of; as if they thought that Medicine was always to take a like Charm, without putting them to the Expence of much Time or Pains. They do not conſider the wonderful Variety of the Diſorders of Nature, and the Stubbornneſs of ſome Caſes, which will not permit the Sick to be wholly paſſive, but indiſpenſably oblige him to conſpire with his Phyſician, and ſtrive indefatigably to exalt his Conſtitution to a Degree requiſite to ſupply the Defect of Internal Phyſick; which induſtrious Striving on the Part of the Sick, being what is here meant by Exerciſe, and

which it is my Purpoſe to repreſent as more efficacious than it is generally believed to be; I think it proper, firſt, to explain what I mean by it in this Place.

By *Exerciſe* then I underſtand all that Motion or Agitation of the Body, of what Kind ſoever, whether voluntary or involuntary, and all Methods whatſoever, which without the Uſe of Internals may (or without which Internals alone may not always) ſuffice to enable Nature to expel the Enemy which oppreſſes her; confining myſelf to the Conſideration of it, only as it may prove Curative, not as Palliative, or barely Preſervative.

And here, before I attempt to demonſtrate how Exerciſe proves ſo beneficial in ſome few Caſes, it may not be amiſs to premiſe briefly ſome of the Ways Nature takes to relieve herſelf when in Danger of being oppreſſed, which may ſerve to illuſtrate my

my following Diſcourſe; as likewiſe ſome Inſtances of the Efforts of Nature cauſed by external Application, or at leaſt by ſuch Internals as cannot be ſuppoſed to be Cordial or Vinous, or to be aſſimilated with the Blood and animal Spirits.

Firſt, then: We may obſerve how Nature acquits herſelf of what we commonly call a Cold, wherein a conſiderable Quantity of the *Materia Perſpirabilis* is detained, by a ſudden Conſtriction of the Pores of the Skin. We ſhall find, that after ſome Time the ſaline Particles growing turgid, vellicate ſome Fibres of the fifth Pair of Nerves diſperſed above the Noſe, which by Conſent draw the Diaphragm into a convulſive Motion, by which the Air is preſſed out of the Lungs through the Noſe, with ſome Violence; and by the Shock the Glands of thoſe Parts are opened, and the Humour, which was detained, is let out. This is *Sneezing*; to which frequently is joined

Gaping

Gaping or *Retching*, another Method of Nature to ſhake off a Load that ſhe finds growing upon her. This is more often repeated than *Sneezing*, and may be conceived to dilate ſome internal Parts of thoſe Stretchings-out of the Limbs, and more plentiful Inſpiration. *Sanctorius* tells us in the 31ſt *Aphoriſm* of his fourth Section, that, * *Corpora Oſcitatione & Pandiculatione horæ dimidiæ ſpatio magis perſpirant, quam tribus horis alterius temporis*; and compares it to a Cock's clapping his Wings after his Reſt: So that it is manifeſt, that even in that vulgar Affect there is an Alteration cauſed in the Body, that is not contemptible.

To theſe may be added the *Singultus* or Hiccough, by which the Ventricle, when too full, endeavours to relieves herſelf, either by throwing off ſome of the rarefied Contents by the Gullet, or perhaps by the *Pylorus*.

Laſtly,

* Bodies perſpire more in half an Hour by Oſcitation and Retching, than in three Hours at another Time.

Laſtly, Let us conſider how *Laughter* affects us, and it will appear, that this Contrivance of Nature, wherein the Body does ſympathize with the Mind, proves ſo beneficial by the playing of the Muſcles of the *Thorax*, and the preſſing-out of the ſaline Particles, ſo frequently and ſenſibly as it does in ſome chearful People, to whom it is more habitual than others, inſomuch, that it comes to be proverbially a Cauſe of Fatneſs. All theſe Inſtances ſhew, that Nature ſeems to receive more Relief from the Compreſſion or acting of the containing Parts ſtrictly taken, than moſt Men eaſily imagine.

As to extraordinary Efforts of Nature, to paſs by what happens upon a ſudden Surprize, Fear, Paſſion, or the like, it is certain that Torture will raiſe the Spirits for ſome Time very much, and there are as great Effects follow upon Irritation, which does not come up to the perfect Notion of Torture. What wonderful

Effects

Effects do we ſee produced by ſtrong Emetics, given by Surgeons in ſome Caſes of the Limbs and extreme Parts. Where a Perſon ſo grieved has oftentimes a robuſt Conſtitution and perfect Health, there the Medicines, though given inwardly, cannot be ſuppoſed to act after the common Manner of Alteratives, by paſſing into the Blood, by the Spirituouſneſs of their Parts, or the like; for the Perſon being in Health, needs no Alteration to be made in the Blood and other Juices, which are as good as they can be deſired to be; but by the Irritation of the Fibres in the Ventricle, the Spirits are raiſed to the higheſt Pitch they are capable of, and brought to communicate that Elaſticity to the whole Body, all the Springs of Life are wound up, all the Pumps of Nature (if I may ſo ſpeak) ſet a playing, and by theſe Means the Agony is extended to the extreme Part affected, and the Matter fixed there is attenuated and brought to

flow,

flow, that it may be abſorbed by the Blood, and diſcharged in the Circulation: Nay, we may take notice of the great Power of a more gentle Irritation of thoſe Fibres in thoſe weaker *Hyſteric* People, whoſe Spirits are of ſo fine a Make, or ſo ſcattered and weakened, that they cannot long bear Faſting, without very troubleſome Symptoms following upon it; for they, we may perceive, are in a Senſe ſtrengthened at thoſe Time, that the Contents of the Stomach happen to be ſo rarefied, as to cauſe a gentle *Ægritudo*, a lingring Sickneſs and Nauſeouſneſs, though not ſufficient to cauſe them to vomit; for they ſhall then diſpenſe with the Want of that Food, without which, at other Times, they could not poſſibly ſubſiſt with any tolerable Eaſe, and find themſelves as ſtrong and as free from their Tremors, Shiverings, and other ill Symptoms, as if they had eat and drank plentifully; and likewiſe during that Sickneſs, the Salts ſhall come

come off plentifully in the Urine, which will then recover its proper Colour, though it was before as limpid as common Water. From hence it is manifeſt, that the animal Spirits may be made to expand, dilate, or in ſome ways act upon themſelves, without the increaſing their Quantity by ſuch internal Medicines as may be ſuppoſed to be converted into their Subſtance.

Having premiſed theſe Things, I ſhall proceed to enquire, after what Manner Nature endeavours to clear herſelf of ſome few Diſtempers, which I ſhall conſider in their proper Place, and likewiſe how ſhe may more eaſily ſucceed in thoſe Endeavours, if duly aſſiſted by moderate Exerciſe; which Aſſiſtance, if at the firſt View it may ſeem ſlow and gentle to produce ſo great Effects, will yet with the Allowance juſtly due to all Sorts of Alterative Phyſic, *viz.* of a Habit or frequent Repetition, appear to be ſufficient

ficient to procure thoſe Ends I ſhall aſſign it.

There is this Difference between the moſt compleat Productions of Human Artifice, and that divine Piece of Mechaniſm, the Body of Man, that the former are always the worſe for wearing, and decay by Uſe and Motion; the latter, notwithſtanding the Tenderneſs of its Contexture, improves by Exerciſe, and acquires, by frequent Motion, an Ability to laſt the longer; and though the Circulation, and continual and infinite Succeſſion of Particles are the immediate Cauſe of Life, yet the Health, the Strength, the Well-being of the Individual, is in great Part owing to the Effects of a General Motion ſuper-induced to theſe internal Motions; which it is ſo far from diſordering, that it aids and aſſiſts them to a greater Degree than we are wont to imagine; for in our Conſiderations of the Animal Oeconomy, we ſeem to regard Nature only

only as in a quieſcent State, without a due Allowance for the Alterations cauſed by the Motion of the Whole, which yet are confeſſed by all to be ſometimes of great Conſequence: For that general Motion acting both on the Fluids and Solids of the Body, may ſometimes proves the laſt and beſt Reſort, for reſtoring the *Equilibrium* between them.

As for the Fluids: One would think the Shape and Make of the Blood-Veſſels, were ſufficient alone to lead us into an Opinion of the Neceſſity of Exerciſe. By reaſon they all terminate in a Cone, they muſt needs reſiſt the Paſſage of the Blood incomparably more than they would have done, if they had been Cylindrical; and though all the Branches of the Capillary Arteries would, if taken collectively, make a greater Diameter than that of the great Artery, yet the Conſiſtence of the Blood, and the extreme Fineneſs of thoſe inviſible Meanders,

Meanders, require the frequent Preſſure and Aſſiſtance of the Muſcles to increaſe the Circulation, which accordingly we always find very much augmented by thoſe Means; yet it is the Reſult of this ſwifter Current of the Blood, which ſhould be moſt valuable to us; I mean the better Digeſtion and Mixture of the various Particles conveyed into the Blood. I believe it will be allowed on all Hands, that the beſt way to bring an animal Fluid to a greater Degree of Perfection, is Digeſtion; and the Excellency of that Operation conſiſts in the juſt Degree of Heat which cauſes it; or, to ſpeak perhaps more properly, in the juſt Agitation or inteſtine Motion of the Particles, which may be ſuppoſed to occaſion that Heat. The Standard, or Meaſure of this Heat or Agitation in the Animal Oeconomy, is to be taken from what we obſerve in a Man in perfect Health, and in the Prime of his Age; when his Blood flows with its due Velocity, when there

is an uninterrupted Secretion of all that is disagreeable to it, and it is wrought up to its florid Consistence, and a just Proportion between the serous and grumous Parts. Now this we may successfully imitate by repeated Exercise; when the Blood happens to be impoverished and languid, we may increase the Velocity of the Circulation, and consequently the Heat following upon it, by which a great many crude Particles will be attenuated and ripened, either for Mixture or Secretion, and there will be an equal Distribution of the attenuated Particles, to the several Emunctories of the whole Body, by reason of the Solids co-operating with the Fluids; whereas it is often quite otherwise when an internal Medicine is given, designed for one Secretion only, which may promote that, and perhaps hinder another; as a Medicine which agrees with the Stomach, sometimes offends the Head; for the nervous Parts being, as it were, passive in the Case, the Secretions cannot be so equal-

ly

ly performed as when the whole Body is exerciſed. I would not be here miſunderſtood, as if I ſuppoſed that this firſt Effect of Motion, this Digeſtion would avail in many Caſes, as where an ill Ferment is lodged in the Glands, or where the morbifick Particles have been ſo long a forming, and are ſtrongly combined in the Blood; but this may take Place where a greater Degree of Agitation is abſolutely neceſſary; as when the Blood is effete and languid, when the Chyle comes into it diſpirited, and when even a proper Medicine proves offenſive and burthenſome, and there is ſcarce Power enough left in the Blood to maſter its Particles, and apply them to their proper Uſes; then, I ſay, it is time to make the Solids aſſiſt the Fluids in the diſperſing of this Load which lies ſo hard upon them, which by gentle and cloſe Exerciſe may be more eaſily done than many imagine. Beſides, there may be a Diſtemper occaſioned by Particles of a looſer Texture in the Blood, than is uſual in moſt Caſes,

where Nature may contend and ſtruggle with the hoſtile Particles, and yet not be able to get the Victory; where there may not be a perfect Fever, nor yet a quiet Coalition between the Blood and thoſe foreign Particles. In ſuch a Diſtemper as this, it muſt needs be very proper to give a due Agitation to the Blood, to prepare thoſe Particles for the ſeveral Emunctories that are ready to receive them: And this may be performed by a juſt Digeſtion, if we do but conſider how much the Body is adapted to it, and how much more noble the Digeſtions are in the Animal Oeconomy, than in thoſe produced by human Contrivance. In all artificial Digeſtions the Particles which are to be ſeparated by the Agitation of the Liquor, muſt either evaporate or ſubſide; but in the Body there are a Multitude of excretory Ducts ready to receive the Particles of ſuch a determinate Figure, and as renders them excrementitious, and proper to be caſt

caſt off; ſo that nothing is left but what is proper to the Animal Fluids, and which Vehemence of the Motion mixes and unites, at the ſame Time that it breaks and moulds the others for their proper excretory Channels: So that the Agitation is in this Caſe (as Dr. *Grew* very well expreſſes it in his Treatiſe of *Mixture*) as "*carrying the Key to and fro 'till it hit the Lock; or within the Lock, 'till it hit the Wards.*" How do we know the exact Degree of Agitation, that is requiſite to unite the Particles of the Fat, which are continually flowing in a very great Quantity into the Blood, with the Aqueous, by the Means of ſulphureous or ſaline Particles? Do we not frequently obſerve in ſcorbutic Perſons, who have led a ſedentary Life, that their Urines are covered with an oily Film of ſeveral Colours? And is it not very natural to ſuppoſe from thence, that the Blood wants a due Motion to keep thoſe oily Parts united with the others? But it is

no wonder if these Things are not well considered, when there is scarce any who makes Allowance enough for the Quantity of the fat Particles, which are continually passing into the Blood; which must needs be very great, seeing the whole Skin is lined with its Vessels, besides what is heaped up about the *Omentum* and the Kidneys: So that unctuous Medicines are copiously intruded upon the Habit of the Body when there is a great Wasting of the Flesh, without regarding that the Blood is not able to master the natural *Pinguedo*, but gives it down daily, in all Probability, for want of a just Degree of Agitation or Digestion, to keep it suspended in the Blood, and to apply it to its proper Uses, and prepare it for its proper Vessels.

Beside the Power of Exercise on the Secretions of Particles purely Excrementitious, and the better Mixture of those which are Homogeneous, it

is

is to be conſidered, that there are in the Oeconomy, Secretions made to return with Advantage into the Blood, out of which they are made; and the Conſideration of the Nature of theſe does afford us freſh Reaſons to ſet a Value upon the Uſe of Exerciſe, becauſe the Body is ſo framed and adapted, as to require it, in order to the furthering and increaſing theſe Operations: And if in the Buſineſs of Fermentation, which is only a gradual Separation of the Muſt from the ſpiritous Particles of the Liquor, we find that the Motion of the Veſſels in which the Liquor fermenting is contained does ſo much improve that Operation, as we are convinced it does by the Effects of the Carriage by Sea on Wines and other Liquors in Casks; of how much greater Importance muſt the Motion of the Body be, in order to the perfecting the Animal Fluids, in a Syſtem of Mechaniſm ſo contrived as to expect and demand ſuch an Aſſiſtance? Where

the Solids are ſo fine-ſpun, as to determine the very Shape of the Particle of a Fluid; and where they are ſo diſpoſed, that a Fluid never paſſes by them but it carries off ſome Melioration and Improvement, and therefore cannot well arrive too frequently at thoſe Paſſages where it receives ſo happy an Alteration. Let us ſuppoſe the Blood to paſs the moſt extreme Parts twelve Times in an Hour, when the Body is not moved; if the Motion of the Body increaſes this to fifteen or ſixteen Times in an Hour, it will neceſſarily follow, that the Quantity of the Secretions by the Liver, the Spleen, the Brain, and the reſt of the Glands, which ſeparate the beneficial Juices, of which I am ſpeaking; the Quantity of theſe, I ſay, muſt needs be augmented; which in Proceſs of Time, when this is brought to a Habit, muſt be of ſome Conſequence. To inſiſt but on one of theſe Secretions: I take it to be no Paradox, that the more a Man ſtirs himſelf, the more ani-

animal Spirits are made in the Brain: Though it will be ſtrait retorted, that by the very ſame Motion and Exerciſe, there will be a Waſte of the Spirits by Perſpiration, more than proportionable to the Overplus that is made in the Brain. And though I grant this, it will not ſuffice to diſcompenſate the Benefit which the Blood reaps from the Augmentation of the Quantity of the animal Spirits infuſed into it (if I may ſo ſpeak) from the Brain; becauſe the true animal Spirits have their Work to do in the Blood, before they come to paſs off at the Skin: They are not of that fugitive Make, which at firſt Thought moſt Men are apt to ſuppoſe them to be; they ſeem to be deſtined to contemporate the Acrimony of the Blood, to embrue it with a plaſtic Quality, and may ſerve to execute other Functions, beſides that of Motion: So that it is not at all to be wondered if a Perſon, much accuſtomed to Exerciſes, notwithſtanding the daily Expence of a greater Perſpiration,

ration, ſhould have his Blood of a better Condition, and more rich than that of another Perſon living a ſedentary Life, by reaſon of the greater Impreſſion, the greater Tincture (if I may be allowed ſo to ſpeak) of this moſt exquiſite and inimitable Fluid.

Theſe Things are not to be ſtated exactly, and yet they are not to be accounted altogether precarious; for though we ſhall never perhaps be able to know exactly what the Animal Spirits are, yet we may make a ſhift to diſtinguiſh what they are not. According to the common Notions, a well-prepared Volatile Salt, after it has paſſed the Lacteals, and comes into the Blood, might be taken to be a pure Animal Spirit; and yet, undoubtedly, the Fluid prepared by the Glands of the Brain, has ſomething in it tranſcendently preferable to any Thing that can be the Effect of Art. Whether thoſe Glands are ſo diſpoſed, as to unite ſome Vitro-aerial Particles with

with others proper to ſerve as a Vehicle to them, is not to be determined by me or any Body elſe; but it may not be altogether ſo abſurd to gueſs at ſome ſuch Thing, ſince we know nothing in Nature that can afford Particles of that Elaſticity as Nitre does; and we may diſcern, that the animal Spirits ſeem to conſiſt of a *Fulgur*, an * *Impetum faciens*, ſomething that is Irradicating; and yet withal, there ſeems ſomething extremely mild and plaſtic, and as it were tenacious, combined with the elaſtic. I hope I do not run into an *Hypotheſis*; I would carry this no farther than it can be kept in Countenance by *Phœnomena*, ariſing in the Cure of Diſtempers: For thus we ſee in the nervous Atrophy, though the Spirits, taken as *Impetum facientes*, paſs freely, and are not obſtructed, as in the Palſy, yet the benign plaſtic Quality ſeems to be wanting, becauſe the Habit of Body does not thrive,

* That which Impels and cauſes Motion.

though

though the Spirits are brought all over it: And that the Spirits, when they are in their true Purity, are concerned in Nutrition, is plain enough; becauſe the intercepting of them, by cutting off a Nerve, always cauſes the waſting of the Part to which that Nerve leads.

Thus I have endeavoured to ſhew ſome of the ſecret Advantages accruing to us from the frequent Uſe of Exerciſe; and by which it will appear that the Fluids of the Body are of ſuch a Texture, as will admit of Improvement from the greateſt Rapidity of their Current, that is conſiſtent with the Organs through which they are conveyed.

But, *Laſtly*, to put theſe Things paſt all Doubt, by a well-known Obſervation; we need but conſider what is ſometimes the Effect of too much Exerciſe upon taking a purging Medicine,

cine, and that is an *Hypercatharsis*. * The Particles of the Drug being sublimed, and rendered more active by the greater Agitation in the Body, display a much greater Violence than otherwise they would have done in a Person of the same Constitution, who had given himself to Repose. This has been long ago observed, by *Hippocrates*, in the *fourteenth* and *fifteenth Aphorisms* of his *fourth Section*: From whence it naturally follows, that the Motion of the Body may cause great Alterations in the Blood; may very much improve any Juices that are conveyed into it; and that in some nice Cases, where the alterative Physic is very mild, and perhaps given in too small a Quantity, it is absolutely necessary to have Recourse to the Use of Exercise, to give an Energy to it, that it may produce the desired Effect.

* An excessive Purging.

Having

Having thus briefly conſidered the Power of the Uſe of Exerciſe, I come now to ſhew after what Manner it affects the Solids; and that I take to be, *firſt*, by giving a greater Tenſion to them, or reſtoring the true Tone of the Parts by Curing the Relaxation by which they were weakened.

That I may explain what I mean by this *Tenſion* or *Tone* of the Parts, it will be neceſſary to conſider, *firſt*, how great is the Benefit we daily receive by only changing the Poſition of our Bodies, from an horizontal to an erect Poſition, when we quit our Beds, where in the Time of Sleep the Body has been relaxed: And this will appear beſt by the ill Conſequences which follow upon a Perſon's being confined by an Accident to keep his Bed for a few Days; for ſuch a one always finds upon his getting up again, that his Spirits are diſordered; he finds himſelf Vertiginous in ſome meaſure, and a great deal weaker than he was before

before he betook himſelf to that Poſture. From whence it evidently appears, that Standing or Sitting, the familiar Exerciſes (if I may ſo call them) of the moſt ſedentary Life, are abſolutely requiſite to keep up the Balance on the Part of the Solids, even in a State of Health, and that more violent Exerciſes are as requiſite to recover this Balance, when ſunk by Sickneſs. I know it may be objected here, that this Obſervation is chiefly owing to the Cuſtom of changing the Poſture of the Body alternately, in ſuch a Space of Time, and that the Breaking of that Cuſtom occaſions thoſe Diſorders: But this will not ſuffice; for an erect Poſition is eſſential to the Well-being of the Body of Man: And if the Infant was not at ſuch an Age brought to it by Degrees by the Nurſe, though it might grow up to the Bulk of a Man, and live many Years, yet it would be a kind of a Bed-ridden Creature; Paralytic, as to the Uſe of its Limbs, though with the Senſe of Feeling, and much

much weaker internally, for want of that Advantage which the Fluids receive from the Solids by this moſt familiar Degree of Tenſion, which we experience in ſtanding, which Poſture has ever been eſteemed as a Tonick Motion.

But the Stiffneſs or Strength of the ſolid Parts will appear more evident by that ſenſible Increaſe of the Strength which Men experience when they ſet themſelves upon any vigorous Exerciſe; which continues, till through the Greatneſs of the Perſpiration they grow tired, and relax again: Or, to borrow an Illuſtration from Beaſts, It will appear by what *Jockeys* obſerve, who when they deſign to take the Bearings of a Running Horſe, that is, meaſure the Extent of his Strokes, they uſually let him gallop a Mile or more firſt, as ſuppoſing that he cannot come upon his Legs (as they term it) till he has run a conſiderable Time; that is, he cannot ſtrike out ſo far, though

though preſſed ever ſo much to it, upon his firſt ſetting out, as he can after he has run ſome Time: Which explains what I aſſert, That a proper or due Degree of Exerciſe, enables the Nerves to dilate themſelves ſufficiently to take in a greater Quantity of animal Spirits, or ſome other Way, to us unknown, gives them a better Tone, or elater, and conſequently fits them for more vigorous Actions.

But to bring the Senſe of this Tenſion nearer to a Caſe of Sickneſs: Let any Man reflect, how he found himſelf after an Acute Diſtemper, wherein the ſolid Parts were mightily relaxed by the Heat of the Fever. When a Man in that Caſe riſes firſt from his ſick Bed, and makes a ſhift to walk a very little in his Chamber, though he quickly grows faint, and wants ſome Cordial to refreſh him; that is, though his vital Spirits ſink, as the Antients loved to expreſs it; yet he perceives a certain Stiffneſs, Tenſion, or Strength in the ſolid Parts, by that

firſt Attempt to walk, which never leaves him, but increaſes daily, till he recovers his perfect Health.

Theſe are ſome familiar Inſtances of the Senſe we have, after what Manner we come to acquire more Strength upon the Uſe of Exerciſe, and which every Man alſo may recollect that he has experienced more or leſs in himſelf; tho' in other Caſes the ſolid Parts are always ſtrengthening by Exerciſe, without ſo plain a Senſe of it, as in the Inſtances above-mentioned: As we ſee what exceſſive Strength ſome Men gradually acquire, by a conſtant Practice of vehement Motions, begun when they were Young, which growing upon them by Degrees, they are not ſo ſenſible of the Increaſe of it. This is the Caſe of Tumblers, Rope-Dancers, and the like, in whom the nervous and ſolid Parts muſt be incomparably more wound up more tenſe than in all other People: And thus we ſee the ſtrongeſt Men are often

ten thin and raw-bon'd, as we call it; that is, though daily hard Labour and great Perſpiration carry off a great deal of the groſſer Fluids of the Body, yet are the Muſcles not flaccid, but tenſe and firm, capable of greater Actions than the Muſcles of thoſe who ſeem to have a better Habit of Body; which plainly indicates, that Exerciſe does communicate ſome Strength to the nervous Parts, which cannot be any other way procured; and that we may argue from the Greater to the Leſs, that if healthy Perſons may acquire ſuch monſtrous Strength by Uſe, People that are Valetudinary may, by ſetting themſelves upon a reſolute and diligent Practice of moderate Exerciſe, obtain a proportionable Increaſe of Strength.

It may be expected, perhaps, that I ſhould endeavour to explain how the Fibres come to receive a greater Power to act, by being often put upon Action, and to ſhew wherein the

Elater, the Spring of the Solids, does consist: But this has been attempted so largely by an eminent Author, Dr. *Baglivi*, and so much to the Disgust of very many, that it is better to rest contented with plain Experience, than to frame an *Hypothesis* for the *Modus* of so obstruse a Method of Nature, which, in all likelihood, Mankind will ever be ignorant of. But, as far as we may reasonably guess, by frequent Distension the Nerves receive a greater Quantity of animal Spirits; because the Limb which is most used, grows biggest: And there is reason to induce us to suspect, that the Fibre itself strengthens by Use, has a peculiar Faculty to exert itself more and more, as often as the *Imperium Voluntatis*, the *Fiat of the Will*, sets it upon Motion. But unless we knew the Bond of Union, and understood how the rational Soul acts upon the animal Powers, we must be content to be most ignorant, the nearer we approach in our Disquisitions to that Union: But the ex-

experimental Knowledge of theſe Parts ſufficiently reproves thoſe who hope to be delivered from ſome Diſtempers ſeated in the Solids, without acting ſuitably to the Nature of the Solids, the Subject of their Diſtempers: As for Inſtance, Suppoſe a Perſon, by frequent and unneceſſary Uſe of the Bagnio, and more unneceſſary Bleedings; by the Uſe of hot Liquors, and a perfect Diſuſe of all bodily Exerciſe; by Paſſions of the Mind, and other Irregularities, is brought into the very worſt of hyſteric Symptoms, with a Flaccidity, and Relaxation of the whole nervous Syſtem; How ridiculous is it for ſuch a Perſon to expect to be perfectly reſtored to a firm Habit of Body by internal Alteratives, and Methods little different from thoſe Things which occaſioned the Diſtemper; which though they may give wonderful Relief in the Paroxyſm, yet can never reſtore the Tone of the Solids, which muſt be treated in a Manner proper to themſelves, by Frictions,

Exercise of the Body, the Cold Bath, and the like; which are very likely to be able to succeed to a perfect Cure. For why ought we not to suppose, that as all Fluids have more or less Tendency to purify and exalt themselves by Fermentation, the Solids should otherwise have a Propensity proper to the Make, to recover themselves by a due Tension? And what can be more reasonable and natural, than to conclude, that if a supine and luxurious Course of Life has enervated the Body, an active and vigorous one should restore it? If it be objected, That gentle Emetics have gone a great way towards procuring a perfect Recovery from some hysteric Cases; I have premised already, that they act upon the Fibres, and put them upon frequent Contractions, much after the same Manner as a total Exercise of the Body; and therefore in this last Case, where the first Passages are not in Fault, their Way of acting illustrates what I assert, that the Solids must be made to strengthen themselves, and

recover

recover their Spring by frequent Endeavours. But for Alteratives, ſtrictly taken, I think it may be juſtly a Queſtion, Whether there is that Medicine in Nature, that can remove this Diſtemper, when it has been of long Continuance; though the World has been taught above an Age ago, by *Paracelſus* and his Followers, to expect what I fear is not within the Extent of Nature: And the Impudence of Emperics is ſo great, as to promiſe every Thing that is abſurd and romantic; which keeps People up with Hopes, that they may be ſo happy as to meet with that mighty Secret, which, even in the Quantity of a few Drops, ſhall, as it were, charm away the moſt troubleſome and riveted Diſtemper, and ſo, inſtead of being cured, they are killed by Expectation; when the Power of Recovering their Health was in their own Hands, if they had reſolutely ſet about the proper Means: Like the Country-Fellow in the Fable, who, when his Cart ſtuck in the Mire,

muſt needs be calling upon *Hercules* to come and help him, when with ſetting his own Shoulders to the Wheels, he might eaſily have got clear.

But moreover, a ſecond Advantage ariſing from Exerciſe, is, that it gives the ſolid and nervous Parts a grateful Senſation, which in ſome Caſes is not contemptible; a gentle Agitation of the Spirits being able to remove ſome Pain ſituated in thoſe Parts, which perhaps nothing elſe would remove ſo ſurely and ſo ſoon. To explain the Manner of this by a trivial Obſervation, (if any Thing in Nature can be ſo) let us conſider, how we can ſeparate the *Cuticle* from the true *Cutis* without Pain: It cannot be done with an Inſtrument without extreme Pain; it cannot be done by Veſicatories without ſome Pain; but it may be done with Chafing without any Pain at all, or rather with ſome Pleaſure, till you leave off Rubbing, and the Air comes

to

to act upon the naked Fibres. Now this cannot be attributed to the Heat of the Part only, for then hot Medicines applied to the Skin would do it as eaſily; but muſt be ſuppoſed to be owing to a certain Agitation of the Spirits in the Extremity of the Fibres, which affects them with ſo agreeable a Senſation as to ſurmount even the Pain of a Separation of their Covering, the Scarf-Skin. Now it will be allowed by all, that whatſoever Senſation there is in the Extremity of the Fibre, the ſame there is at the Origin of it in the Brain; ſo that a pleaſant Senſation in the Extremity, muſt needs be the ſame in the common *Senſorium*: And therefore it is eaſy to account for the good Effects of Frictions of the Limbs in ſome Sorts of Fits, by giving a new and different Motion to the Spirits, and thereby diſengaging them from their diſorderly Motions. And then if acting thus upon the Extremity of the Fibres produces ſuch an Effect in them, it is natural to imagine, that

that Motion, or gentle Concuſſion, which much after the ſame Manner, in ſome Proportion, acts upon the whole Body of the Nerves, muſt affect them with a Senſation proportionably agreeable, and may prove ſufficient to diſpoſe the Spirits to leave their Diſplofions and irregular Motions, when they happen to be ſo diſcompoſed, and conſequently remove the troubleſome Watchings and painful Symptoms occaſioned by thoſe Diſploſions, when other Means prove ineffectual. Thus we ſee how natural it is for thoſe hyſteric Perſons, who are vexed with obſtinate Watchings, to fall into a true and refreſhing Slumber by the Motion of a Chariot, when Opiates will have no Effect upon them, but rather increaſe their Watchings: The Spirits being the moſt ſtubborn Part of the animal Oeconomy, and not always to be compelled even by that potent Drug.

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The abſtruſe Nature of this Part of the animal Oeconomy, will not permit us to come at a fair Explication of theſe *Phænomena*, any otherwiſe, than by what we at different Times experience; for we muſt firſt underſtand, as the Author of the *Diſpenſary* very well expreſſes it,

How the ſame Nerves are faſhion'd to ſuſtain
The greateſt Pleaſure, and the greateſt Pain. Diſpenſ. *pag.* 3.

But we may diſcern, that the very Interruption of Pain is ſome Degree of Pleaſure; and that the leſſer Degrees both of Pain and Pleaſere have ſomething of a relative Nature in them. A Perſon that is afflicted with ſome Pain finds ſome Alleviation of it by tumbling and toſſing in his Bed; which tumbling and toſſing at another Time would be a ſort of Pain: And if any one thinks this ought to be imputed to Fancy rather than Reality,

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I anſwer, It is ſuch a Fancy as none can be free from; and the denying a Perſon in ſuch Circumſtances, the Liberty of gratifying it, would be the greateſt Cruelty, and a high Aggravation of the Pain. Beſides, in Pains of the Membranes, proceeding from the Corroſion of ſharp Humours thrown upon them, where the Part cannot but be very ſenſible of the Pain thoſe Particles cauſe; yet, even in this Caſe, the Spirits may be interrupted, or diverted from the performing ſo acutely their Office of Senſation, by being put into different Motions. I knew a hardy labouring Man, who happening to be ſeized with a violent Pain in his Hip, for two or three Nights, as ſoon as he came to Bed, kept beating his bare Hip with a Bedſtaff a great while together, before he could get any Reſt, and by that Means blunted the Pain, and tired himſelf into Sleep; (though afterwards he removed both the Pain and the Cauſe, by running a Packneedle himſelf

himſelf through Part of his Hip:) Now if thus much may be done in the membranous Parts, where the Cauſe of the Pain is * *ab extra*, What may not be done in nervous Caſes, where the Diſorders of the Spirits are the prime Occaſion of the Pains, if we can communicate to thoſe Spirits a Motion contrary to that Motion which occaſions the Pains, which certainly may be done by moderate and agreeable Exerciſe?

From theſe Conſiderations I cannot but be induced to think, that in all obſtinate Pains, cauſed by the irregular Motions of the Spirits, and in the true hyſteric Cholic, one of the moſt frequent of thoſe Sort of Pains, it would be more natural, and in no wiſe abſurd, to recommend to the Patient the Uſe of a Chaiſe, or light Calaſh, even in the Paroxyſm itſelf, than the Fatigue of Medicines; the beſt of

* From without.

which,

which, except Opiates, ſo often prove deluſive. That Exerciſe is convenient for Women, with Liberty to ſet or lie: And though the Motion at firſt may ſeem a little troubleſome, and the Shocks too rude; yet I think, upon what I have hinted before, there is great Reaſon to expect, that after a little Patience the Spirits would be brought to relent, and diſengage themſelves from the *Plexus's*, * where they occaſion ſo great Pain. I am the more confirmed in this Opinion, becauſe there is a Pain which ſeems more deeply rooted, even in the Tendons of the Muſcles, *viz.* the Cramp, which will frequently go off, by changing the Poſture the Part was in when it was firſt ſeized, and eſpecially by getting out of the Bed and walking a little while, when no Preſſure or Ligature will remove it, unleſs the Perſon riſe; by which undoubtedly the Spirits are called back into

* Contextures of the Nerves.

ſome

ſome of the ſuperior Muſcles, or ſome way or other put into a new Sort of Motion.

This Opinion may be corroborated likewiſe by what has been experienced by ſome hyſteric People, who when they have lain perhaps half a Night reſtleſs and diſturbed, and without the leaſt Inclination to Sleep; upon getting out of their Beds, and walking a Turn or two about the Room, ſhall find themſelves quite altered, and when they come into the Bed again, ſleep well: So that if ſo ſudden and ſhort an Alteration of the Poſture of the Body, can produce ſo good an Effect, much more may be expected from the Exerciſe I have above-mentioned; wherein the ſick Perſon may at once enjoy the Convenience of a Cradle, and the Vehemence of Exerciſe.

I might purſue this Notion, in conſidering the *Scorbutic Rheumatiſm*; in which Caſe the Perſons afflicted are

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generally ſtrong, and able to undergo any Sort of Exerciſes; and therefore all the Sorts of Exerciſes which I ſhall hereafter mention, will agree with them. But it will be needleſs to multiply Words; that Diſtemper being chiefly ſeated in the Nerves, what I have ſaid already will ſerve to illuſtrate the Advantage, which Perſons grieved with that Diſtemper might receive from a reſolute and prudent Uſe of Exerciſe.

I hope theſe Obſervations on the Solids, will ſuffice to ſhew the Power of Exerciſe on this Part of our Bodies; and if any of theſe Speculations may ſeem too nice, I would be underſtood, that I conſider them as brought to a Habit, as frequently and cloſely repeated; not as the Uſe of Exerciſe is generally abuſed, being frequently undertaken, but ſeldom gone through with. It is the Want of a due Notion of a Habit, which has occaſioned the Neglect of this valuable Medium

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in Phyſic: Did People allow but the ſame Regard to this, as they do to all other alterative Phyſic, it would then ſoon appear, what great Effects it could produce.

How ridiculous would a Man ſeem, who, when his Phyſician had recommended ſome Medicine to be taken to the Quantity of a Drachm, or of half a Drachm, ſhould go and take half an Ounce of it, and then exclaim againſt the Medicine, that it diſturbed him, and did him a great deal of Miſchief, and that he would never take it more: Or, if inſtead of taking it in a moderate Quantity twice a Day, for a conſiderable Time, he ſhould take that moderate Quantity but once in two or three Days, and then exclaim that the Medicine was ineffectual? He that ſhould act thus, would be thought to be but a very unreaſonable Perſon; and yet after this Manner moſt ſick People ſet upon the Uſe of Exerciſe. You ſhall have a Man ride

fifteen or twenty Miles, when he ſhould ride ſeven or eight; come home very much tired; reſolve never to be ſerved ſo again; and ſo perfectly lay aſide all Hopes of any Good from the more moderate Uſe of that Exerciſe. Another ſhall ride out five or ſix Miles once in two or three Days; finds no great Matter of Relief; deſpairs of any Succeſs from that Courſe; thinks it a trivial Thing, a mere Fancy, when the Phyſician does not know what to do; and ſo he wholly leaves off too. Now allowing that moderate Exerciſe to be a Medium for the Recovering of our Health, that is a very unfair Way of making uſe of it; for when once a Diſtemper will not be driven out by rough Means, by Purging and Vomits, but we are obliged to come to alterative Phyſic, the Work muſt go gradually on, and that Phyſic muſt be uſed without Intermiſſion. What is the Difference between Aliment and Medicament, but this? The firſt is changed into our Nature; the laſt changes

changes our Nature. Now it would be as ridiculous for a Man to expect, that gentle Drugs or gentle Means ſhould alter his Conſtitution, if taken with great Intervals, as it would be for a Man to expect that the Bulk of his Body ſhould keep up or increaſe, though he eat but once in two or three Days: And whatever Regard is due to internal alterative Phyſic, the ſame is due to the moderate Uſe of Exerciſe; for if by it the Secretions are equally promoted, and the Subject-Matter of the Diſeaſe brought to deſpume ſlowly; it is highly requiſite, that theſe Means ſhould be cloſely repeated, with Moderation; that Nature may not be confounded and weakened, inſtead of being relieved; and without any irregular Intermiſſion, leſt the Springs ſhould run down again; leſt the Diſeaſe ſhould have Time to ruin faſter than the Means of Cure can build up.

We ſee, by continual Dropping, ſo ſoft a Body as Water can act upon a Stone; we ſee, by inceſſantly following his Blow, the Smith can bring Heat into his Bar of Iron; ſo that where the Act itſelf, ſimply conſidered, is weak and trivial, yet the Habit is of the greateſt Efficacy.

Neither ought this to diſcourage any, who will give themſelves leave to conſider how ſlow, and yet how ſure, ſome of the Deſpumations, or general Secretions of Nature, are; wherein, if the Certainty and Security will compenſate for the Slowneſs of the Progreſs, they have reaſon to acquieſce and ſubmit, when there is no other Remedy left. How often has it been obſerved, that in ſome paralytic Caſes, after a conſiderable Uſe of the Hot Baths, the ſick Perſon has gone away diſconſolate, without any preſent ſenſible Relief, and yet found himſelf cured in a Month or two after; the morbific Matter being juſt moved and brought to

to flow, when he left off Bathing, and yet not perceptible to himself? And if Nature can be enabled to make such real, though flow, and, for a Time, insensible Advances towards Health, in a Subject half dead; may not we, with a great deal more Reason, expect the same and much more in a Person who has his Nerves free; the Use of his Limbs; and who, notwithstanding his Decay, is able to set upon a Course of Exercise? If Men were not wanting to themselves in a Resolution to undergo, with Patience, the Fatigue of reducing Nature indisposed to its former State by slow Measures, when violent are absolutely to be omitted; they would at last be really convinced, that Health, as well as Sickness, may approach insensibly; and that their tedious Struggles, and seemingly fruitless Endeavours, did gain Ground upon the secret and intimate Spring of the Oeconomy, before they came to be sensible of any the least Relief: For when once, upon the

Uſe of ſuch gradual Means, there appears a ſenſible Amendment, the Point is almoſt gained, and the Work more than half done: As we ſee that upon the Return of the Sun, after Winter, towards us, it is ſome Months before the Earth ſhews any great Signs of his Influence; yet when once it diſplays the Effects of it, we can very well diſcern, that they are ſuch as muſt have been brooding long before we perceived them. And why ſhould not ſome Diſtempers go off leiſurely, when we ſee ſo many come upon us ſo? There ſeems to be a Parity of Reaſon for it, though it is no very comfortable Conſideration. We know the Poiſon of a mad Dog increaſes in the Body for a Month or more, before it diſplays its fatal Symptoms; and there is a great deal of Reaſon to believe that a cancerous Humour is ſome Years ripening, before it creates any Trouble in the Perſon in whoſe Body it is bred: Why ſhould it ſeem ſtrange then, that ſome Diſeaſes require a gentle and gra-

gradual Conflict of two or three Months, when perhaps they have been a longer Time growing upon the Patient?

What I have ſaid would make the greater Impreſſion, could we but have a Hiſtory of the fatal Miſcarriages which have happened upon prepoſterous Methods of Cure: An Hiſtory which, I doubt, would prove a very voluminous one; that Raſhneſs being too uſual in both acute and chronical Caſes. In the firſt, Many are apt to force an Indication, rather than wait for one. In the latter, the World abounds with Examples of the Folly and Impatience of Mankind. To inſtance but in the Dropſy; Who is there almoſt who cannot furniſh you with the Story of one, who from a hopeful Condition in the Uſe of Diureticks, and corroborative Things, caſt himſelf into the Grave by violent Purgatives, recommended by ſome compaſſionate Friend or other, to carry off

the Waters at once, with the Bead-roll of Stories to vouch its Succeſs ; when the other Method, with a little Patience, had certainly brought him to his former Health, and perhaps in much leſs Time than his Diſeaſe was contracted ? So difficult it is for unhappy Man to bear the Penalty of ſome Months, for the Demerits of ſome Years ; and by manly Conſideration to keep from entangling himſelf in his Chain, inſtead of getting out of it.

I am not unaware here, how hard it is to frame Arguments that can have Force enough to prevail againſt the Apprehenſions of the Pain and Trouble to be undergone in the firſt Attempt of Exerciſe, which moſt ſick People have conceived ; and which are oftentimes ſo ſtrong, as to blind the Mind, or bribe the Will : And there is no way to deal with thoſe People, but by Precedents ; by ſhewing them, that thoſe Difficulties have in many Caſes been eaſily overcome. And here the Cold Bath

Bath offers itſelf, a ſevere Method of Cure taken up lately among us, and which upon the firſt Conſideration carries Terror enough in it; which if any one had preſumed to recommend ſome Years ago, he would have been thought one of the moſt wild and barbarous of Men; and yet we ſee now the Tendereſt of the Fair Sex dares commit herſelf to that terrible Element; and upon the firſt Experiment the Fears and Amazements vaniſh. How ſevere is the Sickneſs upon a Man's firſt going to Sea; equal ſeemingly to the Effects of any ſtrong Poiſon; and yet Nature ſoon accuſtoms herſelf to that Motion, which is the Cauſe of it, and the Sailor quickly grows well! And here it muſt not be ſuppoſed, that any ſalt Vapours ariſing from the Sun do contribute to this Vomiting: For it is now very well known to every one, who has but the leaſt Smattering in Diſtillations, that Salt will not riſe with a much greater Heat than that of the Sun: Beſides, it

is

is obſervable, that the oldeſt, or moſt accuſtomed Sailors, ſhall vomit in bad Weather, when the Ship is put into an unuſual and irregular Motion: So that it is plain, that the Motion of the Ship is the only Cauſe of that Sea-ſickneſs. If therefore Nature can ſo ſoon ſuit herſelf to a Motion that can cauſe ſuch terrible Symptoms, how unreaſonable, how childiſh is it for any one to object againſt the Uſe of Exerciſe, becauſe of the common and (in Compariſon of a Sea-ſickneſs) trivial Inconveniencies which muſt be borne in the firſt Trials! Some ſtrong People ſhall be confounded with a very few Glaſſes of Wine; and yet if thoſe very People fall to keeping of Company, and addict themſelves to Wine but a little while, they ſhall drink vaſt Quantities without any Diſorder. The firſt Pipe of Tobacco diſturbs Nature to the utmoſt; but after two or three more, ſhe becomes pleaſed with that which before diſturbed her. In the Animal Oeconomy,

Oeconomy, every Thing is ſo wonderfully contrived, and made to conſpire for the Preſervation of Life, that Nature can adapt herſelf to all Circumſtances; ſhe can expand herſelf to bear the Luxury of a Palace, and contract herſelf to the ſhort Allowance, the Bread and Water of a Priſon; ſhe can be eaſy under a bloated Habit of the Body, and ſhe can make a ſhift to ſuit herſelf to the Expence of Fluxes, and other Evacuations; accuſtoming herſelf ſo to bear them, that the longer they laſt, they may be in ſome Proportion the more familiar: But above all, ſhe, with the moſt Eaſe, accuſtoms herſelf to the Uſe of Exerciſe; ſhe may be ſaid to delight herſelf in that, it being in a a Manner * *de Eſſentiâ Naturæ*; and therefore it is in vain, when Exerciſe is really neceſſary, for a Perſon to complain, after the firſt Trial, and ſay, "I am tired; my Bones are

* Eſſential to Nature.

"ſore;

" ſore ; my Head akes ; I am ready " to faint ;" or the like : For all this muſt be endured, and upon patiently repeating the Motion, though no Abatement appear for ſome Days, yet the Reward will come at laſt : And as theſe Symptoms go off, the Strength of the ſick Perſon will increaſe.

From theſe Conſiderations I think it ſufficiently appears, that what I have before hinted is not at all unlikely, *viz.* That in ſome Caſes, a diſtempered Perſon may acquire, by ſuitable Exerciſe habitually uſed, a Degree of Strength, as much greater than that of other ſick People in the ſame Circumſtances, who wholly neglect all Exerciſe, as the Strength and Agility of robuſt Men, bred up to violent Motions, is greater than the Strength of other People, who, though healthy, yet are not uſed to ſuch Things, and therefore incomparably weaker.

Having

Having thus explained the Power of Motion, both on the Solids and Fluids, and having ſhewed how neceſſary it is, that ſuch Motion or Exerciſe ſhould be continued to a Habit, that it may be rendered ſufficient to procure thoſe Ends it is directed to; I hope, after theſe Conſiderations, it will appear pretty plain, that Exerciſe may deſerve to be taken as a *common Aid* to Phyſic, (to uſe the Term which *Aſclepiades* gave it): And it is under that Notion, that I propoſe it as ſo beneficial a Medium in the Art of Curing: So that Exerciſe in this Senſe is to Phyſic, as Bandage is to Surgery, an Aſſiſtance or Medium, without which, many other Adminiſtrations, though ever ſo Noble, will not ſucceed. It is a Kind of Reſerve; but yet of that Efficacy, that the Thing you moſt depend upon, and although in itſelf very powerful, may yet receive its *Derniere Puiſſance* * from this Reſerve.

* Effectual Power.

And

And to this it is that we muſt undoubtedly attribute the wonderful Succeſs which the Antients had in their Curing with ſuch indifferent Materials, as their Pharmacy afforded them.

This will prove an Aid in a double Reſpect, *viz.* both of the Diſtemper, and of the Medicine.

In Reſpect of the Medicine: It is to be conſidered, that ſome Medicines may require it, in order to enhance their Virtue; others, to remove ſome Inconvenience attending their Operation, which may deter People from uſing them ſo liberally as they ought to do.

As to the Former: The ordinary Circulation of the Blood may not ſuffice to anſwer the Nature of ſome Medicaments, and call out their utmoſt Efficacy; juſt as we ſee the Heat of our Sun will cheriſh and keep alive

live ſome Exotic Plants, but yet will not ſuffice to bring them to their utmoſt Perfection, to flower and ſeed: So that Exerciſe, in this Caſe, is like the juſt and exact Incubation to the Egg; that which animates the Drug, and gives it a Power to produce the Effect it is directed to. A Medicine may not avail any more without Exerciſe, than Exerciſe without a Medicine; and yet when both are uſed together, there may be a Reſult from that Union, of the greateſt Importance.

Therefore, before I come to ſpeak of the Diſtempers moſt liable to the Power of Exerciſe, I ſhall take Notice of two or three Remedies, which ſeem to demand this Sort of Aſſiſtance.

The Firſt is, the Decoctions of Woods. It is the general Complaint of thoſe who take theſe for any Time, that they pall their Stomachs: To obviate which, if it be requiſite that a Perſon ſhould perſiſt in this Courſe, nothing

nothing can be more proper than Riding, or ſome other gentle Exerciſe; becauſe it will keep up the Vigour of the Spirits: And how much the Appetite depends upon that, is eaſy to imagine, beſides that the Intention, the *Diaphoreſis* *, is likewiſe promoted thereby.

Another Medicine which ſhould be followed with Exerciſe, is the Chalybeate, eſpecially in dropſical Subjects; not for fear it ſhould lie heavy upon the Stomach, as the Vulgar think, but becauſe in theſe People, the Contents of the Stomach are much rarefied and flatulent, and the Steel is apt to cauſe Diſtenſions and Gripes, and other troubleſome Symptoms; ſo that it is neceſſary the whole Body ſhould be well warmed, that thoſe Particles may be diſcuſſed, and the Stomach qualified to bear the Chalybeate: Beſides, that acquired Heat will enable

* Sweating.

it,

it, after it comes into the Blood, to diſplay its Effects the ſooner, either as as a Corroborative, or a Diuretic. In the hyſteric and hypochondriacal Perſons, this Medicine gives Trouble after another Manner, by Coſtiveneſs, by Head-ach, and heating the whole Body too much: Now all theſe are much qualified by Exerciſe; for it will procure a Ventilation of many of thoſe Particles, which the Medicine agitates and throws upon the Membranes.

I might proceed to enquire into the Nature of *Balſamicks*, but that I ſhall have Occaſion, as I proceed, rather to ſay ſomething againſt their Uſe in one of theſe Diſtempers, which I ſhall conſider: But if they are to be uſed, what I have already ſaid in Relation to the Fluids, will ſhew that a great deal depends upon a proper Degree of Agitation in the Blood, for the uniting and thoroughly mixing the Particles of a Medicine of this Nature,

that it may be tranſmitted to the deſigned Part to ſome Purpoſe: And as it would be convenient a Balſamic ſhould be taken in a larger Quantity, if the Stomach of ſick People could bear it; ſo during the Time of Exerciſe, while the Body is heated, the Stomach can bear a greater Quantity than at other Times, without any Senſe of Irritation, or Inclination to throw it up. But I ſhall forbear to enlarge any more on theſe Things, and go on to the Diſtempers which ſeem moſt naturally to demand this Kind of Aſſiſtance; in treating of which it will be eaſy to diſcern in every ſeveral Caſe, how the Gymnaſtic Part will agree, or fall in with the Pharmaceutic.

OF

CONSUMPTION.

THE First of the Distempers then, is the *Consumption of the Lungs*. I take this to fall under the Power of Exercise, for these two Reasons.

First, Because the morbific Particles, which are the immediate Cause of the Disease, seem to be of a looser Texture, to be less intimately combined in the Blood, than in most chronical Cases the Particles which occasion each Distemperature seem to be.

Secondly, Because this Case requires the carrying off the acrimonious Particles by equal Secretions, rather than by any one particular Emunctory of the Body.

The *Firſt* Reaſon ſeems to appear manifeſt enough, from the habitual Heat and Diſturbance which are generally complained of, ſometimes even upon the firſt breaking out of the Cough, and from the continual Quickneſs of the Pulſe; all which ſhew, that there is an imperfect Struggle of Nature, frequent and partial Ebullitions, which do not ariſe to a Degree ſufficient to clear Nature of that which oppreſſes her; but yet plainly indicates, that the hoſtile Particles do not unite, or accord with the Blood, ſo much as the Particles of each Diſeaſe do in other Caſes: As for Inſtance, in ſcrophulous, and even in cancerous Caſes; though the Blood is loaded with ſo pernicious, and even corroſive a Humour, yet we find no Diſorder in the Beat of the *Artery*, no irregular Heats, but for ſome Reaſons or other in the Make of their Particles, they paſs better with the Blood, and the Diſeaſe is longer protracted: Now I think

think it ſeems to be a natural Conſequence, that where there is an Ebullition, or Contention of Particles, there is no Union; and that a more general and natural Heat, ſuperinduced by Exerciſe, by the Solids acting uniformly upon the Fluids, may produce a Ventilation of many of thoſe Particles, which Nature contends much with.

The *Second* Reaſon, *viz.* The Neceſſity of equal Secretion, is occaſioned by the Effects of this hectical Diſpoſition, which by bringing a Langour upon the Spirits, a Relaxation or Flaccidity of the muſcular Parts, and even of the Lungs itſelf, renders Nature unable to bear any particular Secretion without great Diſturbance: Thus we ſee upon the Uſe of the gentleſt purging Medicine, the Cough is increaſed, and the whole Body for a Time more than ordinarily diſturbed; the ſame happens upon the Uſe of *Sudorifics*; and, in-

deed, ſcarce any particular Secretion can be conſiderably enforced, without ſome Inconvenience following upon it: So that it muſt needs be the moſt proper Method, if we can attain to it, to enable Nature to do the Work herſelf, by gentle and even Deſpumation of the acrimonious Particles, at all the Emunctories.

To procure this good Effect, I propoſe the firſt of thoſe Exerciſes, which I ſhall conſider more amply in its proper Place, which is moderate Riding. This Exerciſe is undoubtedly the moſt likely to cauſe an equal Exaltation of the Fluids, to reſtore the Tone and Elaſticity of the Ducts, ſo that the hot fretting Particles may be caſt off; ſome of them by ſenſible Perſpiration at the Skin; others by the Kidneys; others by the many *ſalival* Glands; others by the Glands of the *Inteſtines*, where the very acrimonious Particles forced out by that Exerciſe, which

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in a ſpecial Manner acts upon thoſe Parts, may be very much altered while they lie in the *Inteſtine*, undergo a Sort of *Cohobation*, and in all likelihood may ſome of them become inflammable, and ſo diſpoſed, as to prove nutritious, when ſucked up into the Blood, as ſome of the Contents of the Inteſtines always are. This is communicating, *ab extra*, a Power to Nature to act upon herſelf; which muſt needs be more agreeable than to put a Force upon her, when ſhe is languid, and not able to maſter both the Drug and the Diſtemper.

It would be of great Conſequence to People afflicted with this Diſtemper, if they would be brought to conſider ſeriouſly the Diſtinction of the Oeconomy into *the Parts containing* and *the Parts contained*, that is the Solids and Fluids, and the Happineſs of being able to exert the Strength of the Solids, and make

the muſcular and nervous Parts aſſiſt the Blood and Spirits. There are Diſtempers wherein a Man is ſo unhappy, as to have one Part of himſelf only paſſive; as in Fevers, the Intenſeneſs of the Heat affects the Spirits and Nerves to that Degree, that all Power of ſtanding or going is taken away: In a Palſy, the Hopes lie all in the Fluids, or Liquor contained: In other Caſes, the large Glands are ſo much altered in themſelves, that the Motion of the Body would be to no Purpoſe: But here, in this Diſtemper we are treating of, the Caſe is quite otherwiſe; if the ſick Perſon will but entertain a Reſolution to help himſelf, will imploy all the Springs and Fibres of his Body, and by that Means take the labouring Oar from lying always on the Blood alone, he will have no Reaſon to deſpair.

Thus I have conſidered how the Uſe of moderate Riding will conduce to the

the conveying off the ſubject Matter of the Diſeaſe. The next Indication is the ſtrengthening the Tone of the Lungs and muſcular Parts, which in this Diſtemper grows flaccid; I might add of the Stomach too, but that we can help that Bowel by many excellent internal Remedies. Now I would fain know of any Man, how he can reach the Flaccidity of the Lungs by internal Means, till the Diſtemperature of the Blood is removed, when it will go off in Courſe; but would be done much ſooner, if we aſſiſted both the Solids and Fluids at the ſame Time. Now that the very Lungs itſelf may appear not to be out of the Reach of a Habit of Exerciſe, let any one conſider the Strength of that Part, which Divers acquire by frequent Diving; or, to come nearer to our Purpoſe, take any two Men equally uſed to hard Labour, of equal Strength as near as we can gueſs, whereof one has accuſtomed himſelf to Running, the other has never done

done ſo; all the World knows that the practiſed Footman ſhall run a great deal farther, and much faſter than the other can do; though in the common Senſe of the Expreſſion, this latter has a clear Wind, as we ſay, and is in perfect Health: Which invincibly proves, that the Lungs, though a Bowel, are capable of a Habit; and that, with a proportionable Allowance, the gentle eaſy Exerciſe of Riding muſt introduce a new Habit into the Lungs of a conſumptive Perſon, and ſo recover the Tone of that Bowel.

I know it will be replied here, that *balſamic* and healing Medicines are ſuppoſed to ſtrengthen the Parts they are directed to; that they are generous Medicines, of fine Parts, and conſequently fitted to communicate a Firmneſs, a Spring to the nervous and membranous Parts of the Lungs: And if it could not be proved that they did heal ſo much as they have been pre-

pretended to do, I would readily allow they did ſtrengthen theſe Parts: But I have had ſome conſiderable Opportunity to obſerve the Uſe of thoſe Medicines, and I never could find that if Alteratives failed, Balſamics would do any great good; that is, taken ſtrictly as Balſamics, upon a healing Intention. I doubt not, but in the Beginning of the Diſtemper, as Alteratives, they may be of Service, eſpecially the milder Sort: By the pleaſant Senſation they create, and the Conſent of the Parts, they will give preſent Abatement to the Cough; and when brought into the Blood, may, by promoting a * *Diureſis*, or by precipitating ſome of the Acrimony, help to carry off the Cauſe of the Cough, after the alterative Way; but that when there is any Ulceration in the Lungs, and the Blood is loaded with hot and fretting Particles, they ſhould then heal ſo much, I cannot

* Diſcharge of Urine.

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conceive. If we will but give ourſelves leave to examine a little cloſely how they act, when externally applied to a Sore, we ſhall not perhaps find that they are all of them ſuch immediate Healers: Some of them are too fine and ſtimulating to be uſed as Eupolotics, but rather prove Digeſtives; and therefore muſt be more likely to cauſe a too great Agitation in the Blood of theſe People, than a healing of the Ulcer. I know it may be here replied, that they are very proper to cleanſe the ulcerated Parts of the Lungs, in order to their better healing; but I cannot imagine how it ſhould come about, that there ſhould be ſuch great need of cleanſing the *Ulcuſcula* in a Part of ſo ſpongy and membranous a Subſtance as the Lungs, where there can be no Redundancy of *parenchymatous Juices* * to feed the Ulcers: Beſides, it is to be conſidered, that the conſtant Mo-

* Juices ſtrained through the Inteſtines.

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tion of the Lungs will help to deterge the ulcerated Parts: Juſt as if we ſhould ſuppoſe a Man, that has an Ulcer in his Leg, ſhould be ſqueezing the Lips of it together all Day long, we cannot doubt but he would by that means work out the *Pus*, the Slough, and all the Miſpurities of the Sore; and in like Manner, the Heaving and Subſiding of the Lungs will hinder any Thing from bedding or loading itſelf long in a Part that is really ulcerated. And alas! here is the grand Difficulty in a Way to a Cure; we cannot eaſily bring ſo arid a Subſtance as that of the Lungs, to unite when lacerated, becauſe of its continual Motion; ſo that there is all the Reaſon in the World for us to heap in only healing Medicines, ſtrictly taken, without any Thing that may prove in the leaſt ſtimulating. Therefore, whatever Balſamics have done any great Good, I cannot think it has been any other Way than by driving of the Acrimony from the Blood,

Blood, and not by immediately healing the Part affected; so that though these are noble Medicines in Cholics, and simple Affects of the Stomach, where the State of the Blood is quite different, yet here they are too generous. They are like the Sword of a Giant in the Hands of a Dwarf, that will not help but oppress. And as for the oily Medicines, which may be called a Sort of milder and artificial *Balsamics*, we ought to consider that the Blood is repleniſhed with a better Oil than any we can immediately supply it with; I mean the Fat, which to the Quantity of a Pint at least is continually passing into, and out of the Blood: And yet in this ill Habit of the Body it wastes daily, and does not unite with the other Fluids as in a State of Health. What then can we do by the poor Addition of a few Drachms of unctuous Stuff, which after it has passed the Stomach enters the Blood, to the Quantity of a few Grains, and does not

not the leaſt good, in Reparation for the Unpleaſantneſs in the taking, and the Uneaſineſs it ſometimes cauſes in the Stomach of the ſick Perſon?

I hope theſe Reflections will not be miſinterpreted, as if I endeavoured after ſome little hypothetical Notion, as a Wedge to make way for any Deſign of mine: They will appear but too real to any that have been converſant with this Diſtemper. I could wiſh it was all Hypotheſis and Fiction, and that theſe Medicines would perform all that is expected from them: But then to what muſt we attribute the Ravage this Diſeaſe makes, which is known to all to be a melancholy Truth? Not to the want of *Balſamics* certainly, for both Poor and Rich can make ſhift to procure enough of them: The Lozenge and Linctus are in every Body's Hand: But this muſt be attributed to their leading People to take a wrong Aim, to level at the Symptom inſtead of the Diſeaſe.

Diſeaſe. Theſe ſpecious Medicines induce them to be intent on the Cure of that which is moſt troubleſome, *viz.* the Cough, when they ſhould lay the Ax to the Root of the Tree, be more intent on the Cure of the Habit of Body, and not let it be over-run with a poiſonous Acrimony. I am confident Legions of the Dead might have been above Ground, if they had but conceived the Fallacy of theſe Means; if they had but ſtuck cloſe to the proper Quantities of any one good Alterative, they might have plung'd out of their ſeveral Maladies; but by placing all their Hopes in Things directed to the Cough, they have fared like the Dog, which bites at the Stone that is thrown at him, inſtead of biting him which threw it; not knowing that ſuch diligent plying of theſe Medicines is a Kind of Embalming a Man before his Death, and an ill-boding Preſage, that in a little Time he will be in a Condition to be embalmed after it.

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From what I have ſaid it is plain, that I take the negative Way (if I may ſo ſpeak) of curing this Diſeaſe, to be the moſt relied on, that is, the driving the Acrimony, which cauſes the Cough and other Symptoms, to the ſeveral excretory Channels, and clearing the Blood of it: For the Blood, when freed from ſuch acrid Particles, will prove the beſt of Balſams itſelf. Therefore the milder Antiſcorbutics, the Bitters, Decoctions of Woods, and even the milder Balſams, do all contribute their Aſſiſtance upon this Intention, in the firſt State of this Diſeaſe, and do very often ſecure the Perſon that makes uſe of them; and when they have not prevailed alone, if the Uſe of Exerciſe had been ſuperadded to them, they would undoubtedly at that Time have been rendered effectual. But yet I am not ſo bound up in an Opinion, but that I am convinced there is ſuch a Thing as a poſitive Relief in this Caſe, in the ſtrict Senſe of the Ex-

preſſion; that is, a Healing of the Part fretted or ulcerated: But then I believe it muſt be done by Things of a milder Nature than our common *Balſamics*. The Waters of our Hot Bath are able to do a great deal, by the healing Okers in which they abound, and there are other Things which ſeem qualified for this End: But that Qualification neceſſarily ſuppoſing they ſhould be extremely mild and temperate, and, upon the Account of that Temper, it being likewiſe poſſible they may ſometimes miſs taking Effect, it is theſe Conſiderations have induced me to apply the Aſſiſtance of Exerciſe to the Temperament of thoſe Medicines, that by ſuch Means they may be rendered able always to anſwer Expectation. But that both the Nature of the Medicine, and the Aſſiſtance of the Exerciſe may appear the clearer, it will not be amiſs to conſider two or three of theſe Medicines.

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The firſt of them is a Vegetable, which has always been accounted a Pectoral; but after the Rate we uſe it, I much queſtion whether it may not be ſaid to be wholly indifferent; this is *Colts-foot*, a Plant ſeemingly dry, and little likely to effect what I have known it to do.

I ſhall here venture to give a Relation of ſome of the ſtrange Effects of it, which are ſo ſeemingly incredible, that if I had not a full Aſſurance of the Fact, I ſhould not offer it; and though it is not of a Cure of the ſame Diſtemper which I am treating of, yet I hope it will not be thought a Digreſſion, becauſe the Obſtinacy of the Humour, which is the Cauſe of that Diſeaſe which this Herb did remove, is ſo much greater than in the Caſe I am upon, that it may ſerve to give us Reaſon to expect great Relief from it in the Cure of the Conſumption likewiſe, to which it has always been applied, if uſed after the

ſame Manner, and in the ſame Quantity, as it was in that Caſe. It was therefore a ſcrophulous Subject that it relieved; but one ſo deplorable, that the Hoſpitals cannot often ſhew the like. The young Gentlewoman had above twelve Sores upon her; ſhe had had the regular Help of Phyſicians, but was left off as incurable, when a Perſon who was no Phyſician, and did not pretend to any Thing like dealing in Medicines, only he had Reaſon to know the neglected Virtues of this Plant, came accidentally to the Houſe, when the Gentlewoman's Mother was lamenting her Daughter's Condition. After having given her Reaſon to expect ſomething from his Medicine, he promiſed to make it for her; but made her ſend ten Miles, twice a Week, to his Houſe, for the Decoctions of the Herb, that he might conceal it from them, becauſe he knew they would undoubtedly deſpiſe it, if they knew what it was. He therefore made very ſtrong Decoctions of

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it, till the Liquor was glutinous and ſweetiſh, of which ſhe was to drink as much as ſhe could every Day, at what Times ſhe pleaſed: This ſhe followed above four Months, in which Time moſt of her Sores were dried up, and in a little Time more ſhe was perfectly cured. And of this I have Reaſon to be certain, becauſe I lived in the Houſe where it was made, all the Time; and the Perſon who made it did not make a Secret of it for Gain, but only that it might not be ſlighted. This Inſtance I have thus amply related, that it may ſerve as a Hint, that this Herb, when it is uſed as a Pectoral, ought to be uſed after another Manner than we generally do. And that when we do make uſe of Vegetables, in a Manner ſuitable to their Nature, we may find Cauſe to come to a Temper, as to our Opinions concerning them, notwithſtanding the great Plenty of generous Medicines, which Chymiſtry affords us. I have cauſed the

Decoction of this Herb to be made after the ſame Manner, and have given it where I did expect a Cure, and thought that I had Reaſon to believe it did in ſome Meaſure prove nutritive. And we find by *Reuſner*, in his Obſervations publiſhed by *Velſchius*, that it has been uſed as an * *Analeptic*. He tells that *Hillerus*, the Marquiſs of *Brandenburg*'s Phyſician, did reſtore Children out of *Atrophies* † by making them eat of this Herb, fried after the Manner of Clary.

The next Thing I ſhall take notice of, as peculiarly adapted to this Caſe, is *Liquorice*. This Plant was ever reputed by the Antients for the greateſt Quencher of Thirſt in Nature, and therefore they called it *Adipſon*; and upon that Account, *Galen* tells us it was given to dropſical People. *Theophraſtus* calls it *Scythica*, and *Pliny*

* A Cheriſher of the Nerves. † Conſumptions.

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gives us the Reaſon of it, and tells us the *Scythians* were wont to live twelve Days upon *Liquorice*, and a little Cheeſe made of Mare's Milk; ſo that it was in Reputation likewiſe for ſuſtaining Nature, and enabling People to bear Hunger. Its Effects on Pains of the Stomach, the Bladder, and the like, are numerous, and ſome of them very well atteſted: And perhaps there is ſcarce any Alterative that the Antients take more Notice of than this, except their admired *Silphium*. And we may gather from all, that it is one of the greateſt Correctors of Acrimony in general, and that it is very temperate and ſafe, becauſe the Juice of it has been drank in conſiderable Quantities, and that fermented too. After this Account of it, let us ſee how we uſe it: We boil above an Ounce, or an Ounce and a half, in a Decoction of a Quart or two, with other Ingredients. This is a wonderful Conceſſion. But then in our Lozenges, there

we do it to ſome Purpoſe: About equal Parts of Juice of *Liquorice* and *Sugar* make up a ſtupendious Medicine indeed, not remembering at the ſame Time a good Remark of *Tragus*'s, viz. that *Sugar* and *Liquorice* are directly contrary. He glories, ſpeaking of *Liquorice*, that we have found a Sweet that will ſquench the Thirſt, whereas moſt other Sweets will cauſe Thirſt; and inſtances in *Sugar*; which if it be true, can any Thing imply more of Contradiction than our Practice? If we were to make Sweetmeats for Children only, it would be allowable to mix all the Sweets in the Univerſe together: But when the Blood of a poor conſumptive Wretch is heated, and loaded with Acrimony, to ſpoil the moſt agreeable Drug in Nature, by mixing it with its contrary, only becauſe the Form of a Medicine requires it; this, with all Submiſſion, is what I think cannot eaſily be excuſed; this is to cheat People

ple with the *Bellaria* of Phyſick, and tickle Men into the Grave.

I know what will here be the Objection, *viz.* that theſe Things are deſigned only for the Cough, and not expected to cure the Habit of the Body; and that therefore they may be allowed to be a good Sort of Compoſition, for that palliative Service they are directed to: But this will not ſuffice, for there is not one in ten that make uſe of theſe Medicines, but relies of them for the Cure of the whole Diſtemper; and therefore this is the broken Reed that has deceived ſo many, eſpecially of the poorer Sort, and which leads them in ſuch Numbers into the Hoſpitals, to end their Days there, after they have loſt the Opportunities of Recovery, by depending on theſe Trifles. And if any one muſt needs take Offence at ſome of theſe Expreſſions, let him conſult *Ludovicus*, an allowed Judge of theſe Matters, in his *Pharmacia Moderno*

Moderno Seculo applicanda; he will find what is his Opinion of these Things, in his 19th *Page* of his *first Dissertation*, speaking of the *Confectiones communes & candisatæ, Conservæ Recentiorum siccæ (simplicis sui Pulvere plerumque debiliores) Martis Panes, Pandaleon, & antiquariæ Saponeæ Confecturæque reliquæ*, he says, *Væ Hecticis Tabidisque quando tandem ad ejuscemodi Refectiva, Sesamo atque Papavere sparsa, Pineis, Pistaceis*, &c. *damnantur: Arentis hinc fauces (quamvis difficulter interdum) linitas vidimus, curatum neminem, quin potius intensiores inde depascentes Febres, dejectum magis Appetitum, festinatosque Fluxus colliquativos.** And speaking before, *Page* 9. of *Decoctions* and

* Woe to hectic and consumptive Persons when they are condemned to the Use of common Confections, Candies, dry Conserves of the Moderns, (which are much weaker than the Powder of the Simples they are made with) or the *Martis Panes, Pandaleon*, Preparations of Soap, and other Confects of the Antients, mixed with Sesamum, Pepper, Pistachio Nuts, Pine Apples, &c. We see the burning Jaws of the Patient besmeared with these, (and even that is sometimes done with Difficulty) but not one ever cured; their Fevers being made thereby rather more intense, their Appetites more palled, and the colliquative Flux more promoted.

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Infuſions, he ſays, *Pro certis interdum Circumſtantiis in Pectoralibus & Vulnerariis dilutiora hæc contractoribus Doſibus commodiora deprehenduntur:** And, it ſeems, he thinks this Obſervation, relating to the Uſe of *Pectorals*, to be of ſuch Moment, that he makes it one of the Heads of his *Additionary Comment*, or *Appendix*, where *Page* 582. he has theſe Words: *Natura interea nihilominus præ Eſſentiis Extractiſque pectoralibus, præque fauces in internis ibi Ardoribus tantiſper lenientibus Morſulis, Trochiſcis atque Mixturis antihecticis, antiphthiſicis, diffuſius quidpiam & ad remotiora perveniens unà ut plurimum velle videtur.* †

Theſe Citations plainly ſhew, that he thought theſe fugared Compoſitions

* In certain Circumſtances pectoral and vulnerary Medicines are more commodiouſly taken in a liquid than a contracted Form.

† Nevertheleſs Nature ſeems now and then inclined to prefer ſomewhat more diffuſe, and which comes ſooner to the remote Parts, before your Eſſences and pectoral Extracts, your lenitive Lozenges, which relieve the Mouth in the burning Fits, or your antihectic and antiphthiſic Troches and Mixtures.

no appoſite Remedy for Perſons in ſuch Circumſtances, but that whatever Remedy is made uſe of, it ought to be made to dilute as much as poſſible; which does agree with the Reaſon, which I ſhall ſhew anon, for the plentiful Uſe of thoſe mild Vegetables. I have made theſe Citations at large, that what I have ſaid may not be thought to be any Figment of mine, but that it may appear, that I have Precedent as well as Reaſon on my Side. But to return to the Root I was upon: ---Beſides the mixing of Sugar and Liquorice, to what Purpoſe is the aqueous Part of its Juice exhaled? What Harm would that ſoft *Lympha* do to People, who have a continual Thirſt upon them? To what Purpoſe muſt the Juice be inſpiſſated, in order to acquire an Acrimony by lying, not to ſpeak of its Adulterations? Theſe are Things which I could not forbear animadverting upon, becauſe they put us out of the right Uſe of a Medicine, than which there

there is not perhaps a greater *Analeptic* to be found, if it were taken in the ſame Quantity as other Juices are taken. A Medicine that is a Kind of a Balſam *in Fieri*, and the moſt likely to be wrought up to Perfection in the Blood, and of which the freſh Juice ought undoubtedly be taken to a Spoonful or two ſeveral Times a Day. But thus it is, we give any Thing the Name of Phyſic, and then ſtand aghaſt at it, and take it with Guard and Circumſpection, as if it were not poſſible that any Thing ſhould prove a Medicine, and yet be taken in an alimentary Way.

There is another Plant, the *Cynogloſs*, which ſeems not unlikely to be of Uſe in this Caſe, becauſe it ſeems to have ſomething of a like gleamy Subſtance in it. It has been delivered down to us under ſome miſtaken Notions, as if it cauſed Sleep, which perhaps have been occaſioned by its cooling and ſtyptic Quality: But

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a late Author of unqueſtioned Judgment and Experience has uſed it pretty much in Decoctions with *Turnips*, and ſays, it has no ſuch Quality, but recommends it to People in this Diſtemper. To theſe may be added ſome of our Vulneraries, of which there is great Variety of all Rates, of all Degrees of Heat; and among them one of the temperate Sort, never enough to be valued, *viz.* the *Comfreys*, and which in Conſumptions, upon the ſpitting of Blood, may be expected to do great Things. The Roots may be ſo managed by a good Hand, as to be eat as Food. The Female Retailers of Phyſick would perhaps take it ill, if among theſe Things I ſhould forget their Preparations of *Turnips* and *Snails*, which may all have their Time of being ſerviceable, either as Food or for Variety; and, what is more, all theſe Things are compatible with a Milk Diet too: Theſe Things may be taken in ſmall Quantities, at different Times from the taking

taking of the Milk; though if taken with it, they could cauſe no Coagulation, and ſo a mild and medicated Chyle may be continually paſſing into the Blood, to the great Advantage of the Sick.

Theſe Inſtances are ſufficient to ſhew the Nature of thoſe Things which I take to be the moſt adequate Remedy in this Caſe; *viz.* that they ought to be ſuch as are of a Medium between common *Balſamics* and *Acids*, and that they are ſuch as ſeem moſt likely to prove nutritive to People in ſo weak a Condition. The Reaſon why I ſet ſuch a Value upon theſe moderate Things, is taken from the State of the Blood of People in ſuch Circumſtances, which ſeems unable to manage ſtronger Medicines, the leaſt Tendency to a *Diaphoreſis* being ſome Diſturbance to thoſe Perſons: So that what is to be done, muſt be by Things which may ſuit with the Blood, and, as it were, grow upon

upon it, that it may be tranſubſtantiated into its *Craſis* after an alimentary Way: There muſt be a continual Rill of theſe temperate Juices into the Blood, without the obſerving of phyſical Hours, and then it is to be hoped the Blood may renew by Degrees, and the Acrimony may decreaſe for for want of Fuel; and thus we may perhaps better obviate the periodical Ebullitions of the Hectic, by ſubſtracting their Cauſe, than by ſtifling the Hectic by keeping in the Cauſe. I have not Scope here to explain myſelf, but I think the common Cauſes aſſigned for thoſe Fits, do not ſeem ſufficient: I cannot think the Ripening of a Tubercle able to do ſo much; that little Quantity of *Pus* cannot contain a *Putredo* ſufficient for ſuch Effects; not to ſay the ſame Hectic happens, where no Tubercle has broke. To be ſhort, it ſeems to me moſt probable, that when the Blood is ſo much ſaturated with diſagreeable Particles, as in conſumptive Perſons

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it is, these Particles increase and grow upon those Particles which make up the proper, genuine, inseparable Essence of the Blood in its true State: I say, as the first gain Ground, there is so great a Correspondence and Harmony in the Oeconomy, that these latter must contend and resist the other, though in the Contention Nature gains no great Advantage, but only fights and retires till she is quite overcome. This seems to me no unlikely Idea of the Hectic, and if it be true, the best Way must be to substract the Quantity of the morbific Particles, by using such a Food as cannot possibly afford Matter for them.

Having then considered these Medicines, I will suppose it granted me, that they are proper in this Case. I will not say that they shall be sufficient to cure of themselves, (though I do not doubt but they may in some Constitutions do the Work themselves);

but I will only ſuppoſe, that they do greatly diſpoſe towards it; which *Poſtulatum* will, I conceive, be readily granted me: I will ſuppoſe likewiſe that Riding (the Exerciſe I propoſe in this Caſe) does likewiſe diſpoſe towards a Cure; which *Poſtulatum* will be granted too: I will ſuppoſe farther, that theſe two Courſes are compatible, and may be uſed together; as the Medicines help the Fluids and Exerciſe helps both the Fluids and Solids; which *Poſtulatum* cannot be denied me neither: What then naturally reſults from this, but that they be both uſed in Conjunction? And is it not more than probable, that theſe two Methods joined, ſhall effect that which neither of them can ſingly? Do not we ſee enough of this every Day, in natural Occurrences, where one, two, or three Things, indifferent in themſelves, ſhall, when blended together, produce a valuable Effect, which none of them could alone? And ſhall theſe Things be obſerved in leſſer

Arts,

Arts, and be ſlighted when a Man's Health is at Stake? Seeing we abound ſo in compound Medicines, why may we not for once take up with a compound Method of Cure, (if I may ſo ſpeak) that is, if we cannot obtain Health by one Sort of Means alone, why may we not expect it from a Complication?

Thus I have run up theſe Arguments to a Head: I have ſhewn that the Medicines appropriated to this Caſe, ought to be very mild and temperate. Upon the Account of that leſs prevalent Quality, there may be Hazard, leſt they ſhould not always prove equally effectual; and therefore to ſupply any ſuch Defect, I ſubſtitute a moſt eaſy natural Gymnaſtic Courſe, as a common Aid to the Weakneſs of the Medicines, and an Aſſiſtance to that Part of the Oeconomy, which thoſe Medicines cannot reach. Whether this is not moſt ſuitable to, and conſiſtent with the

even Tenour of Nature, though it may not reliſh ſo much of the Magnificence of Art, I muſt ſubmit to thoſe who are beſt Judges: To me it ſeems to promiſe enough, and carry more Healing with it, than ſome Things that are dignified with the great Titles of *Gilead* and *Peru*.

If, after all, there are any People who will think I have taken too much upon me, in venturing to attack the *balſamic* Method; if they cannot think ſlightly of Medicines, which will give ſuch preſent Mitigation of a Cough, and which are ſo fragrant and coſtly; let them enjoy their Opinion, and perſiſt in the Uſe of them; and if they find them, at any Time, not ſo effectual as they could deſire, let them but ſuperadd the Power of Exerciſe, and they will doubtleſs find them much improved; and if they come by that Means to ſucceed, I ſhall not envy their good Effects.

Beſides

Beſides theſe two main Indications, there is ſomething more to be conſidered in the Cure of the Conſumption; and that is, how we may obviate the Moiſture of the Air; which is a very troubleſome Enemy to conſumptive People, of what Conſtitution ſoever, who dare not make uſe of generous Liquors to fence againſt it; for that Practice would be prejudicial upon another Account. Now what can be more natural in this Caſe, than the raiſing the Spirits to reſiſt this Moiſture, by a gentle Motion of the whole Body, which at the ſame Time cauſes a greater Degree of Heat, and that equally diffuſed all over the Body, which muſt needs rarefy, in ſome meaſure, the moiſt Air, and beſides, make the hot and acrimonious Particles in the Blood ſupply the Place of warm internal Medicines, which in another Perſon would have been proper to have been given to oppoſe the Moiſture of the Air? Now this is much

the ſame that the Change of Air can effect in the Body of a ſick Perſon; for 'tis the equal Influence, the univerſal moderate Rarefaction of a warm Air, that makes it ſo beneficial; and if we will caſt in the Benefit of the Tenſion, which is cauſed by moderate Riding, together with the Equality of the Heat, it will appear to be very little ſhort of what is uſually expected from a Journey into a foreign Air: And I could here give an Inſtance of a Gentleman, who when he was in the South of *France*, found but litle Relief, any longer than when he was on Horſeback; and who, after his Return to *England*, found that Riding ſupported him as much as the Change of Air: So that upon the Conſideration of the equal promoting of the inſenſible Perſpiration, and the Benefit which at the ſame Time accrues to the ſolid Parts, this Exerciſe, which I have ſo much inſiſted on, may be allowed to

to be almoſt, if not altogether, an Equivalent to a warmer Climate.

Laſtly, I ſhall urge but this one more Reaſon for this Exerciſe, which is not taken from a natural, but a prudential Conſideration, from the particular Humour of moſt People in this Diſtemper, who are ſtrangely inclined to think themſelves in no great Danger, even though the Diſtemper is far advanced: They do not love to be told the Truth, though it is ever ſo neceſſary: But an honeſt Phyſician is to them, as *Micaiah* was to *Ahab*, he never has any Thing good to ſay of them. They think they are ſtrong enough in the Main. They will tell you, they ſhould be as well as ever, if their ſcurvy Cough, or the Weight on their Breaſt was but removed. Now the Genius of the Sick muſt be conſidered; and theſe People, who have ſo good an Opinion of themſelves, may in ſome Senſe be indulged and wrought upon to exert their imaginary Strength

in gentle Riding, and then they may perhaps come to enjoy that which is real.

I might now proceed farther, to consider in what Degree of this Distemper Riding will be beneficial, whether any Thing is to be expected from it in the second and last State of it: But this would be to run out beyond my Design of Brevity; only I shall take Notice, that it is no rare Thing to meet with Consumptions, without any putrid Fever, or any Reason to believe an Ulcer in the Lungs, or perhaps so much as Tubercles, but a continual Hectic, and a precipitate Waste of Nature, by the direful Acrimony and ill Quality of the *Serum*, as Doctor *Bonet*, in his *Theatrum Tabidorum* observes, *Page* 109. *Tabidorum languor sine pulmonum aut visceris cujuslibet corruptelâ tacitâ vi obrepens Anglis infestissimus est, & nisi primis obediverit remediis (quod rarissimè evenit) fu-*

funeſtus. * In this Caſe I cannot but be of Opinion, that Riding well managed would be ſerviceable, though undertook very late, if there is any tolerable Meaſure of Strength left to put it in Practice.

I muſt here again repeat, that when I here ſpeak of Riding, I underſtand the Habit of Riding, the Want of which Diſtinction, has made it ineffectual to many a Man: He that in this Diſtemper, above all others, rides for his Health, muſt be like a *Tartar*, in a Manner always on Horſe-back, and then, from a weak Condition, he may come to the Strength of a *Tartar*. He that would have his *Life for a Prey*, muſt hunt after it, and when once he finds his Enemy give way, he muſt not leave off, but follow his Blow, till he ſubdue him beyond the Poſſibility of a Return. He that

* A languid Decay, creeping ſilently on, without any Corruption of the Lungs or *Viſcera*, is very common to the *Engliſh*, and unleſs it gives way to the firſt Remedies, which ſeldom happens, proves of fatal Conſequence.

carries

carries this Reſolution with him, will, I doubt not, experience the happy Effects of the good old Direction, *Recipe Caballum:* He will find that the *Engliſh* Pad is the moſt noble Medium, to be made uſe of for a Recovery from a Diſtemper, which we in this Nation have but too much Reaſon by Way of Eminence to ſtile *Engliſh*.

OF

OF THE

DROPSY.

THE ſecond Diſtemper which I ſhall conſider as ſubject to theſe Meaſures, is one *Species* of the *Dropſy*; that is the *Anaſarcous* Kind, from which likewiſe I except thoſe which are attended with a hard Liver, or a remarkable Obſtruction of ſome of the *Viſcera*.

This Kind of *Dropſy*, thus circumſtantiated, does at firſt View ſeem not to need the Aſſiſtance of any extraordinary Means to help towards a Cure, it being the moſt curable of all Dropſies; and we have daily Inſtances of its giving Way to common Medicines: Nevertheleſs there are ſuch Exceptions in the moſt favourable Caſe, as give Trouble enough to a Phyſician ſometimes, and requires more than uſual Application: As for In-

Inſtance; ſometimes a Perſon happens to be brought ſo low by an unſeaſonable Purge, that afterwards Diuretics and Corroboratives will have no Effect upon him, but the Caſe becomes deplorable, without the Rupture of any *Lympheducts*, or other the like Difficulty.

Secondly, When People decline in Years, there are ſome extraordinary Means requiſite to make the Remedies exert themſelves with like Succeſs as they do in younger Perſons.

Thirdly, in Hyſteric Women, it is difficult to carry off the Load of Water by common Means, without ſome ſuch Method as I ſhall hereafter mention; becauſe their Spirits are ſo low, that they can bear no conſiderable Evacuation.

Fourthly, When a Dropſy comes upon an *aſthmatic* Perſon, there are particular Difficulties ariſe, and the ſingular

ſingular Advantages of conſtant and gentle Exerciſe in this Caſe are univerſally known.

Theſe four different Circumſtances of this Diſtemper may ſuffice to ſhew that I have Colour enough for my calling in the Gymnaſtic Method in this Caſe; and it is the firſt of the Exceptions, I mean the ill Effects which ſometimes follow upon the Uſe of Purgatives, which have chiefly occaſioned me to enquire whether we ought in this plain Caſe, thus circumſtantiated, to halt between two Opinions, between Purgatives and Diuretics, without endeavouring to eſtabliſh a certain Praxis upon juſt Foundations.

There are none will deny, but Diuretics are the moſt proper and natural Remedies in this Caſe, if they would always ſucceed, becauſe directed to the proper Emunctory, the Kidneys, and becauſe they can go Hand in Hand with the corroborative Medicines,

dicines, to be given at the ſame Time: I take it for granted therefore, that whenever Purgatives are uſed in this Caſe, it is becauſe the Diuretics do not take quick enough, or in order to carry off the Load of *Serum*, that the Diuretics may the ſooner diſplay their good Effects, becauſe it will be alledged that the *Serum* becomes ſo ropy and glutinous in the Paſſages and capillary Parts, that the Diuretics cannot always act upon it. But though this is granted, it will not ſuffice to warrant the Uſe of the ſtronger Purgatives, becauſe their Manner of acting cannot agree with this Diſtemper, and becauſe thoſe Difficulties objected may be overcome by other Means.

Firſt, The very Nature of ſtrong Purgers make againſt this Caſe. It ſeems very prepoſterous to have recourſe to ſuch deleterious Drugs, to thoſe *Mortis Catapultæ*, (as *Ludovicus* calls the *Eſulas*, and ſuch like Purgatives)

gatives) in order to the reſtoring an impoveriſhed Blood. If they acted only by ſtimulating the Inteſtines, ſomething might be ſaid; but ſince it is indiſputable that they paſs into the Blood, and act powerfully upon it, there is no doubt to be made, but they fuſe and divide it, and break its Globules, and conſequently make as much Water as they carry off; which is the very Reaſon why Sweating is laid aſide, and Salivation, though they both ſeem ſo proper to carry off watery Humours. I know it may be alledged in Defence of theſe Medicaments, that the 36*th* and 37*th* *Aphoriſms*, of the *Second Section*, ſeem to imply, that a ſick Perſon would receive leſs Harm from them, than one that is in Health; but yet this will not excuſe their Uſe in our Caſe, becauſe though the Viſcouſneſs of the *Serum* may blunt the Particles of thoſe Drugs for a Time, and hinder them from working ſo quickly, yet when once they are thoroughly imbibed, and

begin

begin to exert their Force, they ravage the very Principles of Life, and can by no Means be fit for a Perſon in ſo low a Condition. But admit that the Water is carried off by theſe Means, the Blood will be left as poor, at leaſt, as it was before the Dropſy firſt appeared, and then how can we be ſure the Waters will not riſe again? Suppoſe an *Anaſarca* follows upon an *Hæmorrhage*, which is very common, and you draw off the Water by Purging, will not the Perſon be juſt in *ſtatu quo*, upon Suppoſition that the Medicines, in their working, did not impair Nature? But that is not to be granted, becauſe it is impoſſible to ſuppoſe, that ſuch *draſtic* Medicines ſhould not prey upon Nature, even while they are aſſiſting her; and can we be aſſured that the Blood will not run into the ſame Colliquation it did before? Beſides, may there not be ſome Reaſon to ſuſpect, that the very Quantity of the *Serum*, ſuppoſing it is not too turgid indeed, may

may ſometimes be ſerviceable, to the promoting the Activity of the Diuretic; even as we find in the true *Aſcites*, it is of ſome Uſe in the Cavity of thoſe Perſons, becauſe they often cannot ſpare it without certain Ruin? We do not know how much the Conſiſtence of the Fluid may conduce to the keeping its homogeneous Particles combined, and we ought to be very tender of doing any Thing that might tend to diſſolve the *Craſſamentum*, the Globules, which are, as it were, the very *Semen Sanguinis* (if I may ſo ſpeak;) for how far Nature would endure ſuch Meaſures, before the Sanguification would be totally ſubverted, would require a Diſſertation longer than my Scope will permit; but that this is ſometimes done, is not improbable, and I take this to be the Caſe of a young Fellow I knew, who falling into a ſlight Dropſy, goes to an *Empiric* ſomewhere about *Whitechapel*, from whom he had a Doſe of Pills which gave him

about thirty Stools, which ſunk him ſo much, that his Nails turned black, and he died in two or three Days Time: Here it is very likely the Sanguification was entirely extinct, and the Blood changed into a preternatural Fluid, and all by the great Power of theſe deleterious Drugs; and though it is likely the Quack did not know the proper Doſe of his Medicines, yet one would think, this was no more than what might be expected from ten Grains of *Elaterium*, which yet has been allowed by an eminent Writer.

Beſides the weak State of the Blood, the Ventricle is always more or leſs impaired in this Diſtemper, and conſequently unable to be put to bear the violent *Stimuli* of the ſtronger Purgers, without Danger of having its Tone irrecoverably ruined.

It may likewiſe be prudent to forbear Purging in this Caſe, leſt haply

ly there ſhould be ſome greater Obſtruction in the Liver, than we are aware on, for then it might be followed with ill Conſequences. It is true, if that Bowel is really *Scirrhous*, it may be diſcerned, or a great Tendency towards it will ſhew itſelf ſometimes in the Greenneſs and Virulency of the Bile mixed in the Excrements, together with other Indications; but a ſlight Diſorder there is not always regarded, and Brick-coloured turbid Urines are ſo common in all Kind of Dropſies, that we may not diſcern that the Blood does abound too much with a Bile, and ſo a Purge given at ſuch a Time may do a great deal of Miſchief; for the Bile is of a light Nature in Compariſon of the *Phlegm*, and moves eaſily, and no Man knows what he does when he rouzes it. I knew an ill Accident happen once upon a Purge, given by a very eminent Phyſician to a Gentleman in a *Jaundice*, which put him into the moſt extravagant and

fatal *Hypercatharſis :* Thus bold Adminiſtrations, to ſuch weak Subjects, may be attended with tragical Accidents; but the milder and gradual Meaſure may ſucceed, without ſuch dangerous Risks, if we conſider what have been the Difficulties which have lain in the Way, and hindered the Operation of our Diuretics.

The ill Succeſs of our diuretic Method in this Diſtemper, is very much owing to our giving thoſe Medicines in ſo ſmall a Quantity, and to our not changing them for ſome of a quite different Nature, when one Sort uſed pertinaciouſly does not take. That the Quantity muſt be increaſed, there needs no better Argument, than what is brought for the Uſe of Purgers; for if the Blood can diſpenſe with the Particles of a Purgative, it will certainly bear a great Quantity of thoſe which are diuretic only. What Wonders has that Golden Remedy of *Pythagoras* done, the *Acetum Scyl-*

liticum,

liticum, when given to a proper Quantity? And what may not be expected from the *Sal Succini*, which may be given to a Doſe large enough to irritate the Fibres of the Stomach, and in ſome Meaſure ſupply the Place of a gentle Purger; but when it is come into the Blood, it may prove cordial as well as inciding? And now I am ſpeaking of augmenting the Quantity of our Diuretics, I can here affirm a very ſtrange Effect that followed upon an exceſſive Doſe of *Millepedes*, in an odd Kind of a Rheumatic Caſe; for the Cure of which ſeveral Things had been tried in vain, by very good Advice. The *Millepedes* were given to a Quantity ſcarce credible to ſeveral Ounces, and gave a Relief in a little Time, that exceeded all Expectation. This, with other Inſtances, ſomething of the like Nature, every where to be met with, may convince us, that we ought to advance the Quantity of theſe Medicines; to which if we apply the Uſe of Exer-

ciſe, the higheſt Advantages may be expected: For to grant as much as the Favourers of the purging Method can demand, that by Reaſon of the aforementioned Ropineſs of the *Serum*, the Diuretics and Chalybeats will but diſtend the Parts, and make the Juices grow turgid; Is there no Way to remove the Dam, but by ſhaking all Nature at the ſame Time? Muſt we blow up the Houſe to get the Enemy out? To what Purpoſe do we talk ſo much of the Animal Oeconomy, if we reduce its Rules to Practice no more than we do? We are taught the Benefit ariſing from the Conſtriction of the Muſcles upon the Veſſels; and can there be any Caſe which does more apparently call for it than this? When it is hazardous to attempt, by inward Violence, to diſlodge the viſcous Concretions, certainly it is high Time to do it by muſcular Force. This *Hippocrates* ſeems to be experimentally convinced of, by his frequently inculcating the

Uſe

Uſe of Exerciſes in this Diſtemper; Δεῖ παλαιπωρέειν, *you muſt labour*, is his conſtant Expreſſion, whenever he ſpeaks of the Dropſy; which, whoever conſiders the Conciſeneſs that is in all the Writings of that great Man, will be apt to imagine that it carries its Weight with it, and implies the abſolute Neceſſity of acting upon the Lentor of the Phlegm, by the playing of the Muſcles. Beſides, Exerciſe will help to reſtore the Tone of the Parts, which is ſometimes ſpoiled by too great a Diſtenſion, even ſo much as to be in a Manner benumbed; which *Helmont* ſeems to lay much Streſs on, when he, according to his odd fantaſtic Way, calls it the *Anger of the Archeus*, that will not let the Waters paſs; and if there is this Kind of ſpaſmodic Effect, in the Parts leading to the Kidneys, then certainly there is as much Reaſon for one in a Dropſy to get into a Coach upon his taking his Medicines, that the frequent Jolting may aſſiſt their

Operation, as there is for one in a Fit of the Gravel ſo to do. The Heat that is acquired by the Motion of the Body muſt needs comfort the Parts, and rarify a great deal of the Moiſture, ſo that it may the more eaſily paſs the Membranes, as they are dilated by Exerciſe; and if we can, by ſqueezing, make Water paſs through Leather, the whole Skin dried and prepared, may it not much more eaſily paſs the Membranes of a living Animal, when worked and ſtretched by Motion, and aſſiſted by the Warmth which that Motion produces? Theſe may be thought little Things by ſome, but they will be found to be of great Conſequence; by ſuch minute Meaſures, Nature can produce great Effects; and by a Neglect of theſe Things many a great Life has been loſt, in Dependance upon ſomething of a greater Name, that has had no Relation to the genuine Proceedings of Nature.

Theſe

Theſe are ſome of the Reaſons which have convinced me of the Preference of the diuretic Courſe, and which I think cannot be overthrown, by all the Examples of the Succeſs of Purgers; becauſe if we compute the ill Effects of them likewiſe, and ſet them to balance the Good, the very Cures done by them will ſeem but as ſo many *Splendida Peccata*. We ought not haſtily to quit ſafe Means for thoſe which are dangerous, only becauſe they are a little more expeditious: When a Caſe is within our Reach we ought to eſtabliſh our Prognoſticks upon ſure Ground, though they may not be ſo quick as could be wiſhed. We have other Dropſies that are dubious enough, but in this Caſe we ought to ſtudy to bring Things to a Certainty as much as poſſible; which how can we do unleſs our Methods are uniform? It behoves the Patrons of Purgatives to aſſign ſome certain Rule to render the Uſe of them always ſafe, which ſeems impoſſible to be done,

done, and it behoves thoſe who are for inſiſting on Diuretics, to find out ſome ſuch Meaſures, as may make theſe milder Medicines always efficacious; which is what I have been attempting to do; and which, if I do not flatter myſelf, I think I have made to appear plain and obvious: For if we cannot arrive at ſome comfortable Certainty in in this Caſe, I do not know in what we can do ſo; for we are ſo happy as to have thoſe Things as will certainly act upon ſuch a Craſis of the Blood, as will revive and enrich it, when decayed, though not always in the like Space of Time; and when they act too ſlowly, we can enforce their Virtue by theſe Ways I have been ſpeaking of.

Theſe Things are no Figment of mine, they have been the Practice of ancient Times, and are ſo natural a Reſult from a due Conſideration of the Animal Oeconomy, that I cannot enough wonder that in ſo many Diſ-

Diſcourſes upon thoſe fundamental Rules, there has been ſo little Notice taken of the Effects of the Motion of the whole Individual, as ſuperinduced to the internal Motions, that make up the Oeconomy; for if this had been duly regarded, it could not but have been reduced to Practice, and applied particularly to the Cure of this Diſtemper.

Laſtly, I know theſe are hard Sayings to ſome People, who ſend for a Phyſician as one that deals in Charms, and can remove all their Afflictions, while they are wholly paſſive; and they would take it very ill that they ſhould be compelled to a Sort of Labour, while they carry about them a Load in their Limbs: But yet for all this, Nature will be Nature ſtill; and if this be her Voice it muſt be obeyed. He that is in a Dropſy ought to be alarmed, and look upon himſelf as in ſomething the like Caſe with thoſe Criminals whom

whom the *Dutch*, upon their refuſing to work, confine to a Cellar, and let the Water in upon them, that they may be in a Neceſſity either of Pumping or Drowning. And I believe there are but few, but who, upon their being convinced of the real and ſurprizing Benefit of theſe Means, would readily undergo the Fatigue of them; and Things may be ſo managed, thatExerciſe may not be ſo troubleſome as the Sick imagine; an eaſy Pad will quickly grow familiar; and where the Legs happen to be ſo very much diſtended, that there may be ſome Danger, leſt the Skin ſhould be rubbed off, a Chaiſe may ſerve the Turn.

OF

OF THE HYPOCHONDRIACAL DISTEMPER.

THE third and laſt Caſe, which I ſhall expreſly conſider, is the *Hyſteric* or *Hypochondriacal* Caſe; in the Cure of which, the ſeveral Exerciſes which I ſhall hereafter recommend, may all be uſed. This Diſtemper falls the moſt under a Gymnaſtic Method, becauſe the leaſt proper to be treated with much internal Phyſic. This is a Diſtemper which will not drive, as we ſay, but if kindly treated will lead; that is, will not be expelled by Purging, Bleeding, Sweating, or the like, but muſt be treated by more gentle and leiſurely Methods. It is a Diſtemper of the Spirits, and the Veſſels which immediately convey them; and therefore thoſe Means by which they are more

more immediately affected, are the moſt like to prove beneficial. Here it is, if ever, ſtrictly true, that a little Matter gives the Turn; but then that little Matter muſt be equally applied; we muſt give an equal Lift to all Parts of the Oeconomy at the ſame Time; we muſt not apply to the Fluids and neglect the Solids. It is the Want of this Diſtinction, which I take to be the Ground of all our Miſtakes in the Cure of this Diſtemper; we cure but half the Man. When I meet with a languid hyſteric Pulſe, I can eaſily raiſe it, and give a full Beat to the Artery, by anti-hyſteric Medicines; but then what becomes of the Nerves? They are not much helped by this, but ſometimes impaired by it. But then let the ſame Perſon have Recourſe to ſome moderate Exerciſe, his Pulſe ſhall riſe as high as upon the Uſe of Internals, but with this Difference, that the Nerves as well as the Blood, partake of the Benefit. For

we

we may distinguish between this natural Advance of the bodily Heat, which is procured by Exercise, and that which is acquired by Medicines, just as we may between the Effects of the kindly Heat of the Sun, and those of an artificial Fire: Now in the Matter of the Vegetation of Plants, and the Management of some Sorts of nicer Workmanship, though the greatest Care and Industry be used to raise a gentle Heat, which to our Senses, and even to the Measure of the Thermometer, may seem equal to that of the Sun, yet it shall never be able to produce the same exquisite Effects, as the Heat of the Sun does. And so we see in this Case, the mildest and seemingly most agreeable Gums, prove Purgers to some of these People; others again cannot bear *Castor*, without some troublesome Inconveniencies; and how much soever some People may be rapt up with their *Sal Volatile*, and such like Preparations, I can perhaps give an Instance of

of more wonderful Relief given in this Caſe, by a more common Cordial, than ever thoſe ſplendid Medicines could produce. It may not be amiſs to relate it in this Place, becauſe it ſerves to illuſtrate my Deſign, in ſhewing that nothing that has the leaſt ſeeming Violence in it, or rather that nothing, which is not very mild and agreeable to Nature, can be of very great Moment in the Cure of this Diſtemper. The Inſtance then I mean was communicated to me by an eminent Phyſician, and very learned Writer, and is this: He was called to ſee a Maid who had been ſeverely tormented with Hyſteric Fits for ſeveral Days, and had taken Plenty of the Remedies uſual in that Caſe, without any Effect; upon which he was reſolved to try, what a good large Doſe of a true generous Wine would do, conſidering ſhe was a Servant, and conſequently could not be ſuppoſed to be accuſtomed to that Liquor, which would

would have rendered his Attempt fruitleſs, he therefore preſcrib'd ſome Powders of no Efficacy, to obviate the Fancy of the By-ſtanders, and ordered the Apothecary to ply her with ſome Wine of his own procuring, that he could depend upon, till ſhe had taken a Quantity, which to her might be rekcon'd very large: This ſucceeded like a Charm; after a good Sleep, ſhe was freed of all her terrible Symptoms the next Morning, tho' before ſhe could ſcarce ſtir her Head from the Pillow, but ſhe fell into a Fit; And I have twice had the Occaſion to ſee ſomething of the like Nature my ſelf. The firſt was, where a large Doſe of Wine took off ſome very ill Symptoms, occaſioned by ſtrong Purgers, erroneouſly repeated in a certain Nervous Caſe. But the Perſon had not been uſed to drink Wine; otherwiſe it could not have produced ſuch a happy Effect. I inſtance in theſe Things only to ſhew, that the Remedies which are moſt proper and

adequate to this Caſe, muſt be ſuch as have ſomething of an inimitable Mediocrity in them; and that Exerciſes do produce Alterations in the Body, which reſemble the Effects of ſuch a ſingular and noble Mean, is not improbable, in regard they act ſo equally (as I obſerved before) both upon the Solids and Fluids. And one would think the ill Succeſs of any Thing but like Violence, ſhould lead us to ſome ſuch Meaſures as theſe. One would be apt to think, that when a Diſtemper, which carries as little, or may be the leaſt Danger of Life in it, of any whatſoever, though ſo very troubleſome, when this nevertheleſs becomes one of the moſt difficult to be perfectly rooted out; one would think, I ſay, that this odd Circumſtance, ſo like to Contradiction, ſhould prompt us to look out for the real Reaſon of it.

Upon theſe Conſiderations I cannot but admire, that the ſame Adminiſtra-

ſtrations, or with very little Difference, (excepting the Chalybeats which may be allowed in both Caſes) are thought proper for temperate Women, and Men of Intemperance, when they happen to fall into the Hypochondriacal Affect, as is frequently enough known. One would think that when the Diſorder, in theſe latter, is owing to the Exceſs of a Liquor, both wholeſome enough, and cordial enough in itſelf, which by its too frequent Uſe has relaxed the Nerves, and conſequently impaired the Spirits, there ſhould be little likelihood it ſhould be removed and taken off by hot Medicines in a ſolid Form, which perhaps do not differ ſo much as moſt People imagine, in their real intrinſic Energy, from that noble Liquid, to which theſe Gentlemen owe their Malady; I ſay, one would think that ſome ſuch Surmiſes as theſe ſhould naturally lead us to an immediate Attempt upon the Parts affected, *viz.* the Nerves, which muſt

be done by Means ſuitable to them, that is by Exerciſe.

Wherever there is a Dejection of the Mind, and a Propenſity to Phantaſtic and Imaginary Fears, there is Reaſon to ſuſpect the Solids, that is, the Nerves, are more in fault than we think for. We may conſider that when a Man is drunk, he ſeldom loſes his intellectual Faculties to any great degree, till the Nerves are quite ſtreſs'd with the Load of Wine, and his Feet go commonly before his Reaſon; and if this were a proper Place, perhaps I could ſhew ſome Reaſons for us to ſuſpect the ſame in the Deliriums of People in a Fever, that the intenſe Heat muſt firſt evidently impair the whole Body of the Nerves, before the Underſtanding will be quite loſt. We don't know what a great deal of Rotation and irregular Agitation the Spirits ſtrictly taken will bear, without any Damage receiv'd; but when the Nerves, the

the Containers of thoſe Spirits, are conſiderably affected, the Spirits contain'd muſt partake of the Miſchief. We know but little of that inconceivable Connexion of Soul and Body; but the wonderful Bond of Union ſeems to terminate very much in the Fibre. For we may obſerve, that thoſe Poiſonous Vegetables which intoxicate, and attack the rational Faculty, do chiefly diſplay their Power on the Nerves, it is in their very Nature, and in the leaſt Quantity to hurt the Nerves; and when Wine, though in its Quality moſt agreeable, is by the Quantity and Repetition of it made to be prejudicial to the Nervous Syſtem, I cannot imagine how other Cordial Medicines, which muſt ſtill in ſome Meaſure keep up the Streſs upon the weakened Nerves, can be the adequate Remedy of this Diſeaſe, but that the Nerves muſt be aſſiſted after their own Way, after a manner ſuitable to their Nature, that is, by Exerciſes: For it is, and ever will be,

one of the Properties of a Fibre, to be the ſtronger for Motion, the better for wearing; and it is but a Law of Nature, ariſing from the Neceſſity of the Conſtitution, that while the Fluids are continually waſting, and running off the faſter, for the Motion of the whole Individual, the other Part of the Conſtitution, the Solids, the Fibres, ſhould by the ſame Means reap ſome Advantages proper, and in ſome Meaſure ſufficient to ballance the Conſequences of ſuch a *Diſpendium.*

All this receives certain Weight from the Argument which is ſo naturally ſuggeſted to us, by the familiar and daily Obſervations, which every one cannot but make on the Health of the poorer Sort of People, eſpecially their Immunity from this Diſtemper: That it is Matter of Wonder that the Spaſms, the Tremors, the Shiverings, the Watchings, and all the very numerous Plagues of an hyſteric

hyſteric Perſon, ſhould not be able to rouſe People into a Queſt of Health, upon Meaſures ſuitable to the Cauſes of Things; that ſuch painful Experience ſhould not animate them into a Reſolution to exchange the Pains of a Sedentary, for the Indolence, at leaſt, not to ſay the Pleaſures of an active Life. I am confident no one could forbear making theſe Inferences, and reducing them to Practice, who has been any conſiderable Time infeſted with this Diſtemper, were it not for the preſent Comfort and falſe Hope, which are conceived from ſome palliative Remedies, in too much Uſe in this Caſe; I mean vinous Spirits, and Compoſitions diſtilled upon them, which, becauſe in the Beginning of this Diſtemper they are found to be comfortable and really uſeful, entice People to have recourſe to the Uſe of them oftener than they ought to do, and in Time ſeduce them ſo much by that deluſive Flaſh of Eaſe, which they give in the firſt Moments of their Drinking,

ing, that they cannot have a due Regard to the Evil Conſequences of ſuch a Practice; theſe Liquors prove a mere Charm, they creep into the Underſtanding, and teach People to impoſe upon themſelves, and fanſy Excuſes for the Uſe of them, till they come to be ſo blinded, as they think that Health itſelf is ſcarce an Equivalent for the Pleaſures which muſt be deny'd in the Abſtinence from them. They who have brought themſelves to ſuch a Cuſtom, are not unlike ſome of our Debtors, who after they have been ſome Time in a Priſon, and learned the Way of living an idle Life upon other Folks Coſt, though under Confinement, they loſe all Senſe of Liberty, and never deſire to ſubſiſt again upon the ſevere Conditions of Induſtry and Labour: And ſo thoſe who have learned to ſip of this Spirituous *Lethe*, quite forget the Value of Health and Strength; they can drown their Vapours, blunt their Pains, and rub on without great Danger

ger a good while; and therefore as for brisk Exercise, the Cold Bath, and the like, they desire to be excused; there is too much Danger in the Practice; there is *a Lyon in the Way:* And thus a sickly complaining Life they lead, because they will not take Courage to use the just Endeavours after a real State of Health. These I take to be some of the Reasons why this Distemper is so seldom totally extirpated, and is become the *Opprobium* both of the Patient and Physician; for else it would be impossible, that People should generally resist the Consequence of that Observation which I hinted before: For if the Labour of the Poor generally secures them from this Distemper, and if this Distemper, whenever it seizes, is of so nice and tender a Nature, that it will scarce allow of any of the common Methods used in the Cure of other Distempers; certainly it behoves the Persons so grieved, to try whether those Means which are preservative to others,

others, may not prove curative to them; which by reaſon that the Subject of the Diſtemper, *viz.* the Spirits and Nerves, are primarily affected by Exerciſe, prove highly probable. For why there ſhould be ſuch Dependance on Internals univerſally, and even in this Caſe, I cannot ſee; to me it ſeems almoſt as ridiculous, as if a Workman ſhould uſe but one Sort of Tool in working on Wood, Stone, Braſs, and other Materials.

I need not here take Notice of any of the particular Symptoms of this variable Diſeaſe, they all being liable to the ſame Regimen; I have already, in another Place, hinted what Relief may be procured by this Method in the hyſteric Cholic, and in the obſtinate Watchings, which will ſcarce ſubmit to the Uſe of *Laudanum*, or at leaſt without ill Conſequences. Therefore I ſhall conclude they all fall under the Power of a reſolute COURSE of EXERCISE.

The

The Exercises most proper here are *Riding*, and the Use of the *Cold Bath:* The first prepares for the second; which Rule, if some People who are the most weakly would observe, they might secure themselves from some of those few Accidents that have befel the too rash Entrance into the Cold Bath. Instead of Riding on Horse-back, Women may take a Chaise, which will allow of swift Motion, and comes little short of the Horse for Agitation of the Body; though I cannot see any Breach of *Decorum*, if a Lady, attended with a Servant, should ride on Horse-back daily for Health, if she like it best. As for those, who upon the Account of their being very fat, have some Reason to be cautious how they go into the Cold Bath, lest some Apoplectic Symptoms should ensue, they may have recourse to another of those Exercises, which I shall treat of, *viz.* the Use of the *Brush*, or *Chafing*, which if used in good Earnest, will not prove so

ſo trivial as perhaps ſome People imagine it to be.

Theſe are the chief Exerciſes which I would recommend in this Caſe, and which if uſed with Prudence and Application, I doubt not are able to effect a compleat and eradicative Cure of this Diſtemper, as certainly as more violent internal Means are expected to ſucceed in any other Caſe; the Spirits and Nerves being not ſo much more untractable, than the Blood and Humours, if treated after a Manner ſuitable to their Nature.

What I have ſaid of theſe three Caſes may ſerve to illuſtrate the Neceſſity of this Method in ſome few other Caſes which I need only name; as the *Scorbutic Rheumatiſm*, which being a Nervous Caſe, will admit of the three Exerciſes I have mentioned, which if ſtrenuouſly put in Practice at proper Seaſons, will do Wonders in the removing of thoſe Pains.

The

The *Nervous Atrophy* is another Caſe, which may be removed by a Gymnaſtic Method, when all the pompous internal Medicines will not avail.

Laſtly, There is one more Caſe, to which Riding ſeems to be in a peculiar Manner appropriated, and that is, that Decay of Nature which is occaſioned by Paſſions of the Mind, which we commonly call Breaking the Heart. Here the Spirits are broke, and ruined by the Streſs of Thought; the Mind drinks up the vital Fluids, and the Ravage proceeds ſo faſt that nothing can avail, but what can in ſome Meaſure interrupt the Eagerneſs of Thought, and repair in Proportion to the Waſte of the Spirits, which Riding ſeems moſt likely to do, becauſe it gives an Alacrity beyond that of Wine; becauſe the Briskneſs of the Motion muſt take a Man off from cloſe Thinking, and ſuch Exerciſe continued long, even

to

to ſome Journeys, muſt, by tiring, incline to Reſt, and break off thoſe voluntary Wakings and anxious Thoughts, which are ſo pernicious; and if ſome Intervals of Eaſe can be gained in this Caſe, there is Hopes that Reaſon or Religion may take Place, and the Paſſions may be laid: For it is the firſt Fury that is the moſt dangerous and violent; if that can be managed, the Point is gained, and there is nothing like hurrying the Body, to divert the Hurry of the Mind.

Theſe are moſt of, if not all, the Caſes, which fall under the Power of Exerciſe as curative. As for the Benefit which may be obtained by Exerciſe, in the Gravel, the Gout, and the like, it is purely palliative, and therefore out of the Scope of my Intention in this Treatiſe. I ſhall now proceed to conſider briefly, thoſe ſeveral Sorts of Exerciſe, which ſeem proper to my Deſign.

And

And here I ſhall not inſiſt upon the various Exerciſes of the Antients, or all thoſe in Uſe now in our Days, but ſhall make Choice of but a few, that ſeem moſt compatible with the Weakneſs and Infirmities of ſick People, and the particular Circumſtances of thoſe Diſtempers which I have already mentioned; and I ſhall begin with the Chief of them, which is that of RIDING.

OF

OF THE EXERCISE OF RIDING.

UPON ſeveral Accounts, this may be eſteemed the beſt and nobleſt of all Exerciſes for a ſick Perſon, whether we conſider it with Reſpect to the Body or the Mind. If we enquire after what Manner it affects the Body, we ſhall find that it is a Kind of mixed Exerciſe, partly *active*, and partly *paſſive*; the lower Parts of the Body being in ſome Meaſure employed, while the upper Parts are almoſt wholly remiſs or relaxed: Nay where a Man is eaſy, is ſure of his Horſe, and rides looſe, there is very little Action on his Part, but he may give himſelf to be as careleſs almoſt as if he were ſeated on a Moving

ing Chair, ſo that he may be ſaid to be exerciſed rather than to exerciſe himſelf; which makes the Caſe widely different from almoſt all other Sorts of Exerciſe, as Walking, Running, Stooping, or the like; all which require ſome Labour, and conſequently more Strength, for their Performance; in all which the muſcular Parts muſt be put to ſome Streſs, and ſome of the ſecretory Veſſels made to throw off too much, while others throw off too little; whereas in Riding, the Parts being incomparably more relaxed, there is a better Diſpoſition towards an equal Secretion of the morbific Particles, and a leſs Expence of the animal Spirits, the chief Agents in all irregular Secretions; ſo that a ſick Perſon may by this Means be greatly relieved and not tired, whereas by other more violent ones, it is poſſible he may be tired and not relieved.

As for the Parts which are more immediately acted upon by this Exercise, it is very plain they are the whole Contents of the lower Belly, so that the Glands of the *Mysentery* and the Intestines, so frequently accused of Obstructions, may in a special Manner be cleared, and their Tone recovered by such repeated Agitation; which is a Thing so manifest and allowed, that it would be needless to multiply Words in the explaining of it. But there is another Sort of Assistance, communicated to the Intestines, which is not so much heeded, and that is the great Alteration, which is made by this Agitation in some of the morbific Particles, as they come to be squeezed out of their several Glands into the Intestines, which in the Time of Riding is doubtless in a much greater Quantity than at other Times. These Particles must not be supposed to be barely carried off as Excrementitious, but to undergo a Change in their Texture, to be several

veral Times in a Manner cohobated, from acid and acrimonious to be volatiſed, and in ſome Meaſure rendered inflammable. That there is ſome ſuch Alteration made in the more liquid Parts of the Contents of the Inteſtines, before they come to grow hard in a true State of Health, is eaſy to prove, and I believe agreed on by moſt Enquirers into the Oeconomy of Nature; and that there is ſome Defect in theſe Operations of the Bowels, in ſome ſick People, is evident from the Conſiſtence, Smell, and other Qualities of theſe Contents, different from what they are found in a State of Health; and that this Defect may be removed by this Exerciſe, ſeems not improbable, if we conſider how immediately Riding affects thoſe Parts, that it acts as a Topic, by thoſe infinite Succuſſions coming cloſe upon one another, which muſt needs cauſe a greater Heat than ordinary, and a better Mixture of ſome of the ſimilar Particles, and a Rarefaction of

others, which after they are thus differently modified and altered, are many of them as it were chafed in again by that continual Agitation, and the Stream of their inflammable Parts is of Uſe, to keep Nature even under the Exerciſe. That there is ſomething like this to be obſerved in the Actions of the Bowels, might be confirmed, by what Glyſters are known to do. I would not willingly verge towards the Fraud of an Hypotheſis: I may be allowed to have had ſome more than common Occaſion, to put me upon making theſe Obſervations, having ſome Time ago been ſo unhappy as to labour under as ſevere a Flux as perhaps ever was known, which held me about a Year and a half, attended with Vomitings, and moſt unſupportable nervous Symptoms; during all which Time nothing relieved me, in the greateſt Paroxyſms of it, like gentle Riding, in ſo much that at laſt I was forced to be in a Manner always on Horſeback, to have the Preſſure

on

on my Bowels rebated, and my Spirits a little refreſhed. The Comfort which I found by that Means I think muſt be attributed to ſome ſuch *Phænomena* as I have above-mentioned; for though I will grant that Riding was more beneficial to me under thoſe Circumſtances than it would be to another, becauſe of thoſe nervous Symptoms; yet how Particles ſo exquiſitely pungent and acrimonious, ſhould be retained and blunted, and made uſeful, as appears from the evil Conſequences of too many Evacuations; how this ſhould come about but after ſuch a Manner as I have above hinted, I cannot underſtand. It is eaſy for thoſe who think in haſte and ſuperficially, to be deceived with the firſt Appearance of Things; but when once Men are calm enough, or under a Neceſſity to think cloſer, they are more likely to come to the Truth of ſuch *Phænomena* as theſe; and to thoſe who do allow themſelves to deliberate before they are poſitive, I doubt not but

what I have asserted, will appear reasonable; and perhaps I should not be so much out of the Way, if I should add, that some of the *stercoracious* Part of the Contents of the Intestines, are not in a strict Sense to be reckoned excrementitious or useless; since though I do not believe Digestion is performed by Putrefaction, yet I believe Putrefaction is a great Medium for the opening of Bodies, and the extracting inflammable Parts out of them; as if we see a little greenish *Hay*, when it comes to be putrefied, shall become inflammable; and there being inflammable Particles in the Intestines, it is probable they may owe their Origin to some such Cause, and not to the first Chylification in the Ventricle. I would not be thought to bring these Reasons, as if I believed Riding would cure a Flux; I do not believe any such Thing, unless upon some very singular Circumstances, and therefore I have not placed it among those Distempers which appear

pear to be curable by Exercise; but I only draw this Consequence from the palliative Relief, which Riding will afford in the Time of a long Flux, that some pernicious and disagreeable Particles may receive such an Alteration while in the Intestines, as to become fit to be re-absorbed by the several Vessels of those Parts, and conveyed with great Advantage into the Blood again, which is making Things to go on in a Round towards a Cure; Nature herself doing the Work, without forcible Evacuations, which though never so gentle, in some fine Constitutions can scarce be borne, and without so much Physic, the very morbific Matter being so altered and disposed in one Part of the Body, as to be useful in another. I have insisted the longer on this Point, that I might make it as plain as possible, because I think it of so great Moment in some Distempers and some Constitutions.

What relates to the Breaſt, I have had Occaſion to explain before; and for the Head, though I cannot ſay it is ſo immediately affected by this Exerciſe as the lower Belly is, yet there is one Benefit accrues to it from Riding, which by Reaſon of this Diſuſe of Exerciſe in Caſes of Sickneſs, is not taken Notice of, and it is this, the great Inclination to Sleep, which a ſick Man finds if he lies down on his Bed as ſoon as he comes off his Horſe: For as the Motion of a Coach does more or leſs diſpoſe all People to Sleep, and the ſwifter it goes, the more we are inclined to doze; ſo the Motion of a Horſe being ſwifter, and the Poſture relaxed as to the Head and upper Parts, though a Man does not perceive any Thing of ſuch an Inclination, while he is Riding and upon his Guard, without any Thing to lean on, yet there is ſo much of the Impreſſion of that Motion remains upon him for ſome Time after he lights off his Horſe, that if he throws himſelf pre-

preſently upon his Bed, eſpecially if he drinks ſome ſmall Draught of wholſome Ale or Wine firſt, he will quickly be in a Sleep, which upon ſeveral Accounts muſt then be very beneficial. This is a Truth ſo certain and ſo valuable to diſtreſſed, infirm People, whoſe Nights are often more troubleſome than the Days, that it is a Wonder what ſhould keep Men from attending to Nature, and falling into ſuch juſt Meaſures that Art it ſelf cannot afford. What can be more applicable to all the Circumſtances of Conſumptive People, than after that by moderate Riding they have diſpoſed the Humours for each Secretion they ſhould by ſuch ſhort and refreſhing Sleeps compleat thoſe Secretions; when moreover, by theſe Means, they may be enabled to deny themſelves thoſe latter or Morning Sleeps, in which they are ſo apt to run into Colliquations. I know ſome may pleaſe to be ſo witty, as to call this Nurſery, rather than a Management

ment worthy of a Phyſician; but yet I will appeal to any that are ſober, calm, and free from Prejudice, whether, if they allow that this Exerciſe does diſpoſe to Sleep, as I affirm, upon this Suppoſal, can any Thing more exactly hit the miſerable Circumſtances of thoſe Perſons? To the Sick theſe little Things are of great Moment, and in ſuch ſeemingly little Things as theſe the accurate Management of the Antients conſiſted, by which they were ſometimes enabled to accompliſh that which we, for want of thoſe Meaſures, do ſometimes fall ſhort of.

As to the other Property of this Exerciſe, it may be convenient for me to make ſome Apology, before I enter upon the Mention of it, becauſe it is ſuch as cannot be well underſtood, but by thoſe who are converſant with *Sanctorius*, upon one of whoſe above-mentioned Maxims it does depend, *viz.* upon that which ſhews

ſhews the great Increaſe of the inſenſible Perſpiration by *Pandiculation* and Gauping. Now I hope the taking Notice of this, will not be thought odd in an Age, of which it is one of the good Qualities, that Men will not take up with the old ſuperficial Way of accounting for Things by occult Qualities, *Putredos*, and the like, but enquire into the *Modus* of the more abſtruſe Actions of Nature, and will be convinced, that whatever are the legitimate Meaſures that ſhe takes, they cannot be thought little or uncouth, ſeeing it is by ſuch *Minima* that ſhe comes to be able to compleat her great Things. If therefore by Gauping, this Perſpiration is ſo very much promoted, as has been diſcovered, and adjuſted by the Experiments of that admirable Author, we may reflect upon how little Things our Deliverance from Fevers and other Inconveniences does depend; nothing being more common upon taking Cold, Surfeits,

or

or the like, than for People to gaup often, till the offenſive Matter is let out; and conſequently it is very apparent, that whatſoever will promote the Pandiculation, muſt be beneficial when the Perſpiration is obſtruſted; and this, though it cannot be effected by any Internal, may be done by Riding, which will diſpoſe all People, the Healthy as well as the Sick, more or leſs to it. I know it may be alledged, that all People when they are tired are more or leſs apt to gaup and retch; but yet it cannot be ſaid, that Thirty Miles Riding is a Tiring to a Healthy Man; and yet let any one obſerve, if that or leſs will not diſpoſe all People to this Affect, unleſs they over-rule it by drinking of great Quantities of good Liquor, which I believe will not always ſuppreſs it neither; but for thoſe who are ſickly, the leaſt Uſe of this Exerciſe diſpoſes them to this Method of Nature, which perhaps no other Exerciſe will do, unleſs they are tired by

by it; which ſhews how much Riding is preferable to other Exerciſes for Sick People, becauſe it does ſome way or other act upon the Secret Springs of Nature, after a more peculiar Manner, and therefore more proper for the promoting that eaſy and even Evacuation.

There is another Property of Riding, that it always gives a Freſhneſs to the Countenance of thoſe who uſe it, which laſts for ſome Time, and will appear upon but once Riding, and the weakeſt and moſt infirm Perſon ſhall diſcover ſomething of this in his Cheeks after this Exerciſe. Now I would fain know what Noble Cordial, whether Solid or Liquid, can do thus? They may cauſe a Fluſhing, but can produce nothing of this Natural Aſpect; and what can more plainly diſcover to us, that there is ſomething inimitable which reſults from the equal and gentle Preſſures, of the innumerable and inviſible

ble *Vaſcula* of the whole Body together; and that that Action which can produce ſuch an Appearance upon but one ſingle Application to it, may be ſufficient to diſplay the greateſt and moſt wholſome Effects when continued on gradually, as it ought to be? And to object againſt the Certainty of thoſe Meaſures, becauſe they muſt be ſlow, is juſt as wiſe as it would be to aſſert, that the Hand of the Dial does not move, or the Budding Leaf increaſe, becauſe we cannot diſcern the Motion of either of them. Nothing certainly could keep us from regarding theſe Tendencies of Nature, but the exceſſive Variety of Medicines, with which we are ſo glozed, that we over-look her gradual Progreſſions, either to Sickneſs or Health, and think to force Her in all Caſes by the Power of Art; whereas in a great many Caſes, ſhe will baffle the boldeſt Adminiſtrators, when by gentle and ſuitable Means ſhe may be reduced to her true State.

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The Famous *Cornaro*'s Caſe, and many others might be alledged, to ſhew how great Changes may be procured, by a ſtrict Attendance to the Demands of Nature; and that it is ſeldom too late to aid her in a natural Way, agreeable to her Weakneſs, and without the Oppreſſion, as I may call it, at ſuch a Time, inſtead of the Aſſiſtance of much Phyſick.

Add to all this the Vivacity, the Gaiety, which does always more or leſs reſult from brisk Motion: Whether it be cauſed by the Spirits expanding themſelves, or the Fibres dilating themſelves, to take in a great Quantity of the Spirits, it is hard to determine, and perhaps of no great Conſequence if we could; but that I may repreſent the Senſe we may conceive of this, I think I have no Reaſon to be aſhamed to borrow, for once more, an Illuſtration from that Noble Beaſt, to which this Exerciſe I am treating of is owing. It is a known

known Caſe then, that if you take a Horſe of the beſt Spirit, and of the beſt Keeping, provided he is not vicious, as they call it; if you mount this Horſe, and walk him, or keep him to a pretty ſlow Pace, you will find him quiet enough; but if you once put him on to a larger Pace, he cannot contain himſelf, but will grow troubleſome, and preſs for a ſwifter Career than perhaps his Rider would deſire; which plainly ſhews, that there is ſomething in the Animal Oeconomy, which *creſcit eundo*, which gathers by Motion, and which cannot perhaps be made to diſplay itſelf ſo well any other Way: For this muſt not be thought to be wholly owing to high Feeding, but to the Degree of the Motion; for the ſame Sprightlineſs, or Courage, will appear proportionably in any Sort of Motion: And but a ſlow Motion in ſome Caſes does not want its good Effects; thoſe who are Judges of the Art of War, tell us, that it is not

beſt

beſt for a Body of Men to ſtand ſtill and expect the Enemy, but to keep in Motion while they are drawing to the Battle; and in the Time of a Siege they make it a Rule, to remove their Men from one Poſt to another, that their Spirits may be kept up by their being in a continual Diverſion. We are as ſubject to the Impreſſions of Motion, as to thoſe of Sound and Harmony, and both are able ſometimes to inſpire a Flaſh of Courage into the Mind that is not to be deſpiſed; and as one was of Uſe to drive away the Evil Spirit of Old, ſo the other may be of Service to diſpel the Hypochondriac Cloud, the deſponding Imaginations of ſick Perſons: A Man may be able by this Means to rouze himſelf, and ſhake off the *Incubus* of the Brain, that lies brooding of cauſeleſs Fears and Doubts, to the great Hindrance of all his Endeavours after Health. It is no ſmall Matter for a Perſon to hope and believe that he ſhall do well; it is ſome Advance toward

a Cure to have so much Courage, Ην φόβος ἢ δυσθυμία, *&c. Si metus & tristitia multo tempore perseverent, melancholicum hoc ipsum:* * As *Hippocrates* observes in one of his *Aphorisms* of his *fifth Section*, Fear and Sadness are sufficient to create a Distemper, and therefore may be very well thought to obstruct greatly the Cure of one: Those Passions cause the Motion of the Heart, and the Beat of the *Artery* to be weaker, and consequently more proportionably lessen insensible Perspiration, which depends so much upon the Vigour of that Motion. We see a more than usual Application to Business, and Intenseness of Thought for but a few Days, shall cause an Alteration in the Countenance of a healthful Man, and make him begin to look pale and wan; how much more then must it prejudice a sick Man, to be always musing on his Distemper, which he

* If Fear or Sorrow continue long, they degenerate into Melancholy.

can

can hardly well forbear neither, when he knows there is real Danger in his Caſe? But all this Anxiety will be very much prevented and interrupted by Riding, and a Man will naturally come to take heart and think well of his Caſe, when he finds he can procure ſuch Temporary or Periodical Relief, if I may ſo call it, ſuch Intervals of Eaſe, as in the Time of Riding he is ſure more or leſs to enjoy.

Theſe Things are ſo agreeable to Nature and Reaſon, that I am confident they cannot but gain reception with thoſe who are acquainted with this Exerciſe: No Man can be an Enemy to Riding, but he who is ignorant of it; and the Generality of Men are by their Employment and Affairs kept ſo much from the Practice of it, that they for the moſt part judge of it by what they have experienced on a Journey, where an indifferent Horſe, bad Ways, and other Inconveniencies make Riding rather a Toil than a Pleaſure: Whereas he who deſigns

to make his Riding turn to account, muſt make it a Pleaſure; he muſt retire to ſome Place where he can have the open Field for his Range, he muſt find out a Horſe that entirely ſuits his Humour, and then it will not be eaſy for him not to delight in a Creature which will perform all he expects from him, that takes Pleaſure in what he is put upon, and delights in his Rider; a Creature which (conſidering the many other Beaſts that are ſerviceable for Draught or Burden) ſeems to be made almoſt only for the Defence, the Pleaſure, and Health of his Maſter; and which has ſo many Excellent Qualities above all other Beaſts, that there is no Man upon Earth, whoſe Gravity or Dignity is ſo great, as not to allow him with ſome Pleaſure to take Notice of them, if the Exerciſe alone will not ſatisfy. There is Variety of the Pleaſures of the Field, ſome of which any Man may make agreeable to his Humour; there is Variety of Chace, both Vio-

Violent and Moderate, a Variety ſo great, that Providence ſeems to have appointed it to be ſubſervient to this Exerciſe, that Men may divert themſelves with Pleaſures, that will keep up the Vigour of the Mind, inſtead of thoſe ſoft effeminate ones, which generally take place, more or leſs, where this is laid aſide. Add to all this the Pleaſure a Man conceives when he finds his Health returning, which will make him delight in the Means of his Recovery, and purſue with Cheerfulneſs that which before perhaps ſeemed indifferent to him; ſo that an active Life, when a Man has laid aſide his timerous Prejudices, and is let into the Taſte of it, will be found not only to have its Advantages, but its Charms too; and he who indulges himſelf long in it, will think it not a Paradox, that there ſhould be an active Luxury, which may exceed all the paſſive Enjoyments of Sloth and Indolence. I have inſiſted the more on the Pleaſure, as well as the

Benefit of this Exercise, because there are some Constitutions of so fine a Make, or else so impaired by some Hereditary Stain, that it must be slow and gentle Means that can act upon them to any Purpose, and the taking Pleasure in those Means must greatly contribute to the Relief they are intended to give.

Though what I have said, may, I hope, carry Weight enough with it, to convince any that will give themselves leave to enquire into the Causes of Things; yet because Examples have so great a Sway with some, I shall add a few Instances of the Effects of this Exercise; and I shall first relate the History of the Cure of Dr. *Seth Ward*, then Bishop of *Salisbury*, which I have translated from Dr. *Sydenham*.

Nostrorum quidem in Sacris Antistes, Vir Prudentia, &c. 'One of our 'Prelates, a Man eminent for Wis-'dom and Learning, after that he 'had

‘ had for a long Time given himſelf
‘ intemperately to his Studies, and
‘ with the whole Streſs of his Mind,
‘ which in him is very great, applied
‘ himſelf too much to cloſe Thinking;
‘ he fell at length into the Hypochon-
‘ driacal Diſtemper, which continu-
‘ ing a good while, all the Ferments
‘ of his Body were vitiated, and all
‘ the Digeſtions quite ſubverted. He
‘ had more than once gone through
‘ the Chalybeate Courſe, he had tried
‘ almoſt all the mineral Waters, with
‘ Purgings often repeated; as likewiſe
‘ Antiſcorbutics of all kinds, and
‘ Teſtaceous Powders, in order to the
‘ Sweetening of his Blood. Thus,
‘ what with the Diſeaſe, and what
‘ with the Cure, continued for ſo
‘ many Years together, being juſt
‘ not quite deſtroyed, he was ſeized
‘ with the Colliquative *Diarrhæa*,
‘ which in the Conſumption, and
‘ other Chronical Diſtempers, when
‘ all the Digeſtions are quite ſpoiled,
‘ is wont to be the Forerunner of

'Death: When he at length consulted
'me, I presently considered that there
'was no more Place left for Medicines,
'since he had taken so many, and so
'efficacious, to so little Purpose; I
'advised him therefore, for the Rea-
'sons above-mentioned, to commit
'himself wholly to Riding for a Cure,
'beginning first with small Stages,
'such as were most suitable with so
'weak a Condition; in so much, that
'if he had not been of a piercing
'Judgment, that could discern the
'Reason of Things, he would not have
'been induced to try that Sort of Ex-
'ercise. I desired him to persist dai-
'ly in that Practice, till in his own
'Opinion he was very well, increasing
'his Stages gradually every Day, till he
'should come to ride as many Miles
'in a Day, as more prudent and
'moderate Travellers usually do in
'one Day, when upon the Account
'of their Affairs they set out on a
'long Journey: That he should not
'be solicitous, as to what he eat or
'drank,

'drank, or have any regard to the 'Weather; but that he ſhould, like 'a Traveller, take up with whatſo-'ever he met with. To be ſhort, 'he ſet upon this Courſe, gradually 'augmenting the Diſtance of his Rid-'ings, till at length he came to ride 'twenty, nay thirty Miles a Day; 'and as ſoon as he perceived himſelf 'better after a few Days Trial, he 'was animated with the Wonderful-'neſs of the Event, and perſevered in 'the ſame Courſe for ſome Months; 'in which Space of Time he rode 'ſeveral thouſand Miles, as he told 'me himſelf, until he was not only 'well, but had acquired a ſtrong and 'robuſt Habit of Body.'

And Dr. *Sydenham* tells us, in the ſame Place, that he cured ſome of his Relations of Conſumptions, by putting them upon Riding much, of whom he ſays, that it was altogether out of the Power of Medicine to help them. *Cum certò ſciam me, vel Medi-*

camentis

camentis quantivis pretii, aut aliâ Methodo, quæcunque demum ea fuerit, nihil magis iiſdem proficere potuiſſe, quam ſi multis verbis hortatus fueram ut rectè valerent. *

A Clergyman, with whom I am acquainted, living in the Country, happened ſome Years ago to fall into a lingering *Diarrhæa*, which hung upon him ſome Years, and eluded the Force of the beſt Medicines of all Sorts, and brought him ſo low, that he had no Hopes of Recovery left. When he was in this Condition, a Phyſician of the City adviſed him to try what Riding would do; not a ſlight Trial or two, but a cloſe Application to it; and his Phyſician told me himſelf, that he charged him to keep to a briſk Motion, and gallop as much as he could, enjoining withal a very ſtrict Diet, that if the Diſeaſe ſhould be

* When I certainly knew, that neither by the moſt coſtly Medicines, nor any other Method whatever, I could be of more Service to them, than by perſuading them, with many Words, that they would be well.

checked

checked by the Exercise, it might not by any improper Food have Occasion to break out again. He set upon this Course in his own Grounds, which are very large and spacious, and by these Means was restored to perfect Health again. It is manifest, this Case was a colliquative *Diarrhæa*, which at a long Run had sunk all the Digestions, and brought Nature into a kind of universal Gleet; so that it came to be properly and solely the Object of Exercise; whereas a new *Diarrhæa* or Dysentery, when the Humours were turgid and acrimonious, is solely the Object of Medicine, and so far from being to be cured this Way, that nothing would be more absurd than to attempt it: For it is the debilitated Fibres that Exercise restores and immediately affects; and whenever Exercise makes an Alteration in the Fluids, it does so by the frequent Working and Constriction of the Fibres, which in a fresh *Diarrhæa*, before the genuine Acrimony

Acrimony that occaſions it is ſpent, would be to no Purpoſe.

A *Northamptonſhire* Gentleman, who about two Years and a half ago came up to Town, and lived in *Hoxton-Square*, was taken ill, and ſent for me: I found the chief Thing he complained of was a Cholic, but he had other Symptoms which made me ſuſpect he was beginning to be cachectic: He was averſe to much Phyſic, and took nothing but the *Elixir Salutis*, which gave him Eaſe, but he continued indiſpoſed; and ſeeing he was unwilling to take any more Things, I adviſed him to ride out a little, he having a good Pad of his own Breeding in the Town. He told me, if he rode at all, he would ride forty Miles. I replied, I thought a much leſs Diſtance would ſerve; and indeed, as much as I was for that Exerciſe, I thought five or ſix Miles would have tired him; for he was much weakened, and his Arms trembled

bled exceedingly when he lifted them up, which was cauſed purely by the Diſtemper, for he was not given to Drink. However, after I had ſtarted that Advice, he perſiſted in his Deſign, and in two or three Days ſet out, and rode, I think, to *Bedford*, or thereabouts, forty Miles in a Day, which, as he told me afterwards, made him ſo ſtiff, that he was laid up for five or ſix Days; but it ſtaved off all thoſe cachectic Symptoms that appeared before, and in about a Month he returned well to Town, and with ſo florid a Countenance, that it could be owing to nothing but that Exerciſe; and he continued ſo for near a Twelvemonth, when theſe Symptoms of an ill Habit of Body, which I clearly diſcerned was begun, broke out again, and continue upon him ſtill. This Example may ſuffice to ſhew, that the Weakneſs which People commonly alledge for a Reaſon againſt Riding, is no Reaſon at all;

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it being, in ſome Senſe, their Weakneſs which makes it requiſite.

I will here likewiſe mention an Inſtance of the good Effects of Walking, the moſt common and unpromiſing Exerciſe; which I had from Dr. *Baynard*. About twenty Years ago, a certain Gentleman came from the *Weſt Indies*, for the Sake of our Hot Bath, for the Cure of a Sort of Palſy, which was occaſioned by the Dry-Gripes of that Country, a Kind of *Colica Pictonum*, which if not cured in Time, uſually terminates in a Palſy: This Gentleman got a Calaſh to carry him to the *Bath*, but it came into his Head, that he would by the Way try to walk as much as he could, and when he found himſelf tired, would get into his Calaſh: Upon this Attempt, he found his Limbs come to him more and more every Day; and before he quite reached the *Bath*, he was perfectly well. And here it is remarkable, that *Bontius*, as great an

an Admirer as he was of fragrant Exotics, in his *Medicina Indorum*, treating of a Sort of Palsy, which some of the *Indians* call *Beriberii*, not much unlike to, if not the same with that I have lately mentioned, he makes it his first Rule in the Cure of that Distemper, That the Sick should not give way to it, but set upon vigorous Exercise. *Sed hoc imprimis curandum est, ne (si ullo modo fieri possit) te lecto affigas decumbendo; sed vel ambulando, vel equitando, vel simili aliquo motu validiore omni conatu te exerceas.* *

Dr. *Baynard* has likewise given me, in the following Letter, an Account of his Recovery from a Consumption some Years ago.

* But the first and principal Care is, if it can any way be avoided, not to take to your Bed, but either in Walking, Riding, or some other robust Kind of Motion, to exercise yourself with the utmost Application.

SIR,

SIR,

IN Anſwer to your Requeſt, concerning my Illneſs, as near as I can remember, I here give you in ſhort the Matter of Fact. In the Month of *October*, *Anno* 1694, I was ſent for to my old Friend and Acquaintance, Colonel *Warwick Bamfield*, at *Hardington* in *Somerſetſhire*; I being then in *London*, and had been very ill all the Summer at *Bath*: My Caſe was, as I and other Phyſicians thought, a true and confirmed *Phthiſis*; for I had an habitual Heat, and continual Cough, Night and Day; a very quick and frequent Pulſe; I ſpit Blood, and exputed a viſcous tough Matter, ſometimes green, yellow, and aſh-coloured, and that in great Quantity. It would ſink in Water, and ſmell ill and fœtid when caſt upon live Coals. My Fleſh went off, my Stomach decayed, and I had that *Livor Genarum* as tabid People uſually have, Night Sweats, &c. So that every Body gave me

me over as loſt and gone; but through a conſtant and cool Regimen in Diet, chiefly Milk and Apples, ſometimes with Honey and Sugar of Roſes, and a diſtilled Milk with the temperate and cool Pectorals, together with conſtant Riding, Night and Morning, in the Air, and that on the higheſt Hills and Places I could find, I thank God, in two Months Time my Hectic abated, Cough ceaſed, Fleſh came on, and my Stomach returned; and by continual Riding, and other Field-Exerciſes, I recovered to a Miracle: And this preſent Year 1705, falling into the ſame Diſtemper, I was cured by the ſame Means, but chiefly Riding. This is very well known, and obſerved by all that knew me at the *Bath*; and I wiſh others in my Caſe and Circumſtances, may find the like happy Succeſs. I am,

Dear Sir,

Your Humble Servant,

EDWARD BAYNARD.

I ſhall here inſert a Relation of a very ſtrange Cure by Riding, which was communicated to me by Dr. *Sydenham*, the Son of the Eminent Writer of that Name; who was likewiſe pleaſed to acquaint me, that he himſelf took a Journey into *Scotland*, that he might get rid of a Cough, which ſeemed to threaten a Conſumption, and that his Journey took it off. But the Cure I am going to mention was of a Gentleman who is related to the Doctor, and now living in *Dorſetſhire*, who was brought ſo low by a Conſumption, that there ſeemed to be no Poſſibility of a Recovery, either by Medicine or Exerciſe; but it being too late for the firſt to do any good, all that was to be done, was to be expected from the latter, though the Doctor did not think that Riding would then do. However, the poor Gentleman ſeeing there were no other Hopes left, was reſolved to attempt to ride into the Country; but was ſo extremely far

far gone, that at his ſetting out of Town he was forced to be held up upon his Horſe by two Porters, and when he got to *Brentford* or *Hounſlow*, the People of the Inn, into which he put, were unwilling to receive him, as thinking he would die there, and they ſhould have the Trouble of a Funeral. But notwithſtanding, he perſiſted in his Riding by ſmall Journeys to *Exeter*, and got ſo much Strength by the Way, that though one Day his Horſe, as he was drinking, laid down with him in the Water, and he was forced to ride part of the Day in that wet Condition, yet he got no Harm by it, but came to the above-mentioned Place conſiderably recovered; where thinking he had then gained his Point, he neglected to ride any more for ſome Time, but finding himſelf relapſing, he remembered the Caution which Dr. *Sydenham* had given him at his ſetting out, that if he ſhould be ſo happy as to begin to recover, he ſhould not

leave off Riding too ſoon, for he would infallibly relapſe and die, if he did not carry on thoſe Meaſures long enough; ſo he betook himſelf to his Horſe again, and rode till he obtained a perfect Recovery.

And I have lately met with a Gentleman of this City, who, upon the Advice of the ſame Phyſician, ſet upon a Courſe of Riding, and recovered of a Conſumption, in which he was very far advanced; and had tried a Milk-Diet, and other proper Means, to no purpoſe, and all along ſpit Blood very much. This Gentleman ſet out on a Journey to *York*, and by Riding cloſe Day after Day for about ten Weeks; in which ſpace of Time, he rode by Computation a Thouſand Miles, he returned healthy and well to Town.

It is to be conſidered from theſe two laſt Caſes, that the Riding through Variety of Airs in a long Jour-

Journey, is of great Conſequence to conſumptive People, and is much better than Riding conſtantly in one Air; beſides, the new Scenes that appear every Day in a long Journey, create ſome ſort of Amuſement in the Minds of Sick Perſons that is not to be thought altogether contemptible.

But I have been the more willing to inſert theſe two laſt Caſes, becauſe they do manifeſtly juſtify that well-grounded Diſtinction, or, as I think I may rather call it, Diſcovery, of that excellent Phyſician whom I have ſo often cited, *viz.* That it may be too late to force any one Secretion to good Purpoſe; and yet it may not be too late to move all the Secretions of the Body at once, equally and gently by moderate Riding; which I doubt not will be found, by all who ſhall try it, to be a real Truth, and of the greateſt Importance, though it happens to be ſo difficult of Acceſs to the Underſtanding of ſome People,

and ſo croſs to the Expectations of this Age, that there are Thouſands of *Naaman*'s Opinion to be found, who will chuſe to ſuffer any Thing, rather than to be convinced, that there can be ſo much Healing in the *Waters of Jordan.*

I could give ſeveral more Inſtances of this Nature; I could bring the Example of a young Lady, the Heireſs of a very eminent Family, who owed what Eaſe ſhe had under a certain Diſtemper chiefly to frequent Riding on Horſeback, and to whom the being put out of that Method proved fatal, when her ordinary Phyſician being out of the Way, another, who miſtook her Caſe, took wrong Meaſures. But I only mention this, to ſhew that it may not be ſo incongruous a Thing, and altogether without Precedent, to recommend theſe Meaſures in ſome preſſing Circumſtances, even to that tender Sex, who, if they knew the ſurprizing Advantages that may

may ſometimes be obtained by this Exerciſe, would, I doubt not, break through the Mode to come at them. No Woman living could bear ſome of the ſeverer Hyſteric Symptoms, if ſhe knew any Way to get rid of them; and I am widely miſtaken if ſome of thoſe Symptoms do not, as it were, point out to us the cleareſt Indications for theſe Meaſures: As in thoſe Women who have been long diſtreſſed and broke with this Diſtemper, we may obſerve ſometimes, that their Spirits are ſo ſcattered, or the Nerves ſo impaired, that they cannot well bear any Thing that pleaſes, or diſpleaſes very much, without ſome Diſorder; if they happen to deſire a Thing very earneſtly, they cannot wait a little while for it, without ſome viſible Uneaſineſs; and though they are ſenſible of this, and their Reaſon is as ſtrong as ever, yet they cannot command themſelves, becauſe the Animal Spirits, the *Medium*, by which the rational Soul exerts it ſelf, are ſo broke and con-

founded. The ſame is likewiſe indicated by thoſe intenſe hyſteric Shiverings, which ſometimes, though more rarely, are to be met with. Now if Women, who happen to be thus tormented, believed that a Recourſe to this Exerciſe would relieve them, I leave it to any one to judge, whether they would diſpute the putting it in Practice.

What I have ſaid concerning Exerciſe, I hope may ſuffice to convince any Man, that the Power of Healing is not confined to the Drug only, but that this Courſe may come in for a Share alſo, and be eſteemed upon a Level in due Place with common Phyſick. And if I ſhould venture to ſay ſomething greater of it, I ſhould not ſpeak my own Fondneſs or Fancy, but the Opinion of one who is known to have been a very ample Judge of the Demands of Nature, I mean Dr. *Sydenham*; with whoſe Encomium on this very Exerciſe, as he has given it

us in his *Dissertatio Epistolaris*, and in his Treatise of the Gout, I shall conclude.

In the first of those above cited Places he has these Words. *At verò nihil ex omnibus quæ mihi hactenus innotuere, adeo impensè sanguinem spirituſque fovet firmatque ac diu multumque singulis fere diebus equo vehi. Cum enim in hac gymnasticæ specie impetus fermè omnis in ventrem inferiorem fiat, in quo vasa excretoria (quotquot fæculentiis, in sanguinis massa stabulantibus, educendis à naturâ instituuntur) sita sint, quæ tanta functionum perversio, aliáve organorum naturalis impotentia vel fingi potest, cui tot succussionum millia eodem die ingeminata, idque, sub dio, opem non attulerint? Cujus calidum innatum usque adeò deferbuerit, ut hoc motu non excitetur & denuo efferveſcat? Quæ verò sive præternaturalis substantia, sive*

ſive ſuccus depravatus in aliquo harum partium ſinu recondi poteſt, qui non hoc corpus Exercitio, vel in ſtatum naturæ conſentaneum perducatur, vel quaquaverſùm diſſipetur elimineturque? Quid quod ſanguis perpetuo hoc motu indeſinenter agitatus ac permiſtus quaſi renovater ac vigeſcit. * And in his Treatiſe of the Gout he thus expreſſes himſelf with ſome Exultation. *Sanè diu multumque mecum reputavi, quòd ſi cui innoteſcerit Medicamentum, quod & celare vellet, æquè efficax in hoc morbo* (ſcilcet Podagrâ) *ut & in*

* But of all the Methods with which I am hitherto acquainted, there is nothing which ſo greatly cheriſhes and confirms the Blood and Spirits, as uſing the Exerciſe of Riding freely almoſt every Day. For as in this Exerciſe, the lower Belly is almoſt ſolely affected, in which the Excretory Veſſels, appointed by Nature to carry off the feculent Matter from the Maſs of Blood, are ſituated; what Help may not be expected in the greateſt Perverſion of their Functions, or any other natural Impotency of the Organs that can be imagined, from ſo many thouſand repeated Succuſſions in one Day, and thoſe too in the open Air? Can the innate Heat be ever ſo ſlackened, that this Motion will not excite and renew it? Can there be any preternatural Subſtance, or depraved Juice concealed in any Corner of theſe Parts, which by this Exerciſe of the Body will not either be reduced to a State agreeable to Nature, or diſſipated and rubbed off ſome Way or another? For as much as in this perpetual Motion the Blood is continually agitated and mixed together, and enlivened as if the Maſs was renewed.

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chronicis plerisque, ac est equitatio constans & assidua, opes ille exinde ampliſſimas facilè accumulare posset. *

* I have long and often thought that if any one ſhould diſcover a Remedy, and make a Property of it, as efficacious in the Gout and ſome chronic Diſtempers as conſtant and aſſiduous Riding, he might eaſily heap to himſelf great Riches from it.

OF

OF

CHAFING.

THE next I ſhall recommend, is a cutaneous Exerciſe; *Chafing of the Skin*, or, as we uſually call it, the Uſe of the *Fleſh Bruſh*. It is very ſtrange that this Exerciſe, which was in ſuch univerſal Requeſt among the Antients, of which they have wrote ſo copiouſly, have given us ſo many Rules and Diſtinctions for the Uſe of it, which they put in Practice in almoſt all Diſtempers, and without which, ſcarce any Man of tolerable Circumſtances paſſed a Day, either in Sickneſs or in Health; I ſay it is ſtrange, that what was ſo much eſteemed by them, ſhould be ſo totally neglected and ſlighted by us, eſpecially when we conſider that their Experience agrees ſo exactly with our modern Diſcoveries, in the Oeconomy

conomy of Nature *viz.* That there is ſo great a Diſproportion between the Evacuations performed by the Skin inſenſibly, and all the others, put together; that the firſt exceeds all the reſt by many Ounces. One would be apt to think, that this Theory ſhall convince us, that the Ancients did find their Account in thoſe diligent Fricions, and that they really anſwered their Expectations in the ſeveral Caſes in which they made uſe of them; and that we, who live in a colder Climate, have much more Reaſon to expect great Advantages from this Method, if we ſhould uſe it to ſome purpoſe, with Continuation and cloſe Repetition. If a Perſon happens to be a little more coſtive than ordinary, what a Concern is he in for it? What Doſes of Purging Phyſick are repeated to take off this ſuppoſed Evil; which at the ſame Time is frequently obviated by a larger *Diaphoreſis*, which at ſuch Times is often

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ſenſible, in the Palms of the Hands, and very often not ſenſible, but yet real, and to the greater Benefit of the Perſon than a Laxity of the Inteſtines would have been. But if ſix or eight Ounces of the *Materia Perſpiralibis* is kept in, which is of far worſe Conſequence than the like Weight of the *Fæces*, no Body is very ſolicitous about that: And if it diſcovers itſelf in a Cold or Head-ach, preſently there is a Recourſe to Purgatives; and if it be the Summer-Time, perhaps the Purging Waters are drank ſo long *de die in diem*, till Nature loſe the Way ſhe has been accuſtomed to; and perhaps never comes to be able to make the ſame Diſcharges for Quantity by inſenſible Perſpiration, as ſhe did before ſhe was thus violently forced out of her Way. This was not the Way of the Antients; they were for ſtimulating and ſolliciting that Part which was primarily defective, that they might reduce it to an Ability to make its wonted

wonted Diſcharges; ſo that were there is great Lett of Inſenſible Perſpiration, which in ſome Caſes is eaſily diſcovered by the Smoothneſs and Dryneſs of the Hands, it is certainly moſt natural to endeavour to ſtimulate the Glands of the Skin by Rubbing; which by the Colour it brings into the Skin, ſufficiently ſhews what it is able to do, if uſed long enough. And certainly we ought to have regard to this Sort of Diſcharge above others, becauſe it can ſupply the Defect of others, better than any of the others can ſupply the Defect of this; and becauſe it is performed by thoſe Veſſels, which are by all now allowed to be the grand Emunctory of the Body, that is, by the true Skin, and all its innumerable Glands.

The Reaſons are ſo natural, that I cannot imagine what ſhould have hindered the putting this Method in Practice, in ſome Caſes at leaſt, unleſs it be, what I have ſomewhere obſerved

ſerved before, the general Impatience of moſt People, who cannot be brought to think well of a Method which does not ſurprize with ſome preſent Alteration; without conſidering, that if ſuch a Method will after a Time cauſe a good Alteration, it is worth their while to wait for it, and perhaps the beſt Courſe that the Nature of the Caſe will admit of. Now that the Efficacy of a *General Chafing* may be made to appear ſo valuable, as to encourage any one to wait for the Effects of it, let us but conſider it in a particular familiar Caſe, which is the Cure of a *Ganglion*, a Tumour in a Tendon, occaſioned by ſome extravaſated Juices between the Coats. This little white Swelling is commonly taken off by frequent Rubbing; and though no Alteration appear for a Week or two, yet if you perſiſt longer, it certainly vaniſhes; which plainly ſhews, that if *Chafing* can produce ſuch an Effect in a Part which is Cold, and comparatively

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Exanguous, what may we not expect from it, when applied to the *Cutis*, which is ſo warm and ſucculent, and ready to give forth ſuch copious Exhalations? This Inſtance, in my Opinion, does ſufficiently illuſtrate the Thing, though we ſee the good Effect of it in another Caſe too, *viz.* the *Rickets*, which is cauſed by the Neglect of Exerciſing and *Chafing* the Limbs of the Child, and which every Nurſe knows may be Cured by ſo doing, if it has not been of long Continuance; or at leaſt that thoſe Exerciſes are equally prevalent with all the Internal Adminiſtrations.

If theſe Things are ſo, why ſhould not we carry on this Method to ſome of the other Caſes too? Why ſhould not we go to Work even in a true Rheumatiſm, after the Inflammation is abated, to fetch out the *Mucous Gelatinous* Subſtance, which has been thrown out into the *Interſtices* of the Muſcles? This Courſe would mould

and break that Viſcous Matter, and render it more fit to be abſorbed and carried off, or diſcuſſed, by dilating the Membranes, and making them more fit for a Tranſpiration; and withal would ſecure the cutaneous Parts from too great a Flaccidity, by keeping up the Spring of the ſmall Fibres; whereas warm Fomentations, tho' they procure a wonderful Tranſpiration, yet they are apt to leave the Part relaxed, and ſodden in a manner, if they are applied too often; and thus it is eaſy to imagine how proper this Courſe is in the other Nervous Scorbutic Rheumatiſm, and what good Effect it will produce if uſed with Diſcretion, at proper Seaſons, with other Exerciſes likewiſe.

There are moreover ſome *Atrophies*, where this is like to prove of ſingular Uſe, by Reaſon of the στύψεως (as *Galen* calls it, in his Third Book *de Sanitate tuenda*) the Dryneſs and Stiff-

Stiffneſs of the Skin, which at that Time ſeems to be fixed to the Part that it covers, and not to ſit looſe as at other Times; and the Pores are obſtructed, and the Skin of a different Hue, from what it is in moſt other Caſes. Here it is eaſy to perceive that *Chafing* muſt be of wonderful Conſequence, the Reaſon of which *Galen* gives in a Chapter or two in the above-mentioned Book, where he treats expreſly of this very Affect.

Laſtly, It muſt needs be very beneficial to thoſe Hyſterical and Hypochondriacal People who are very Fat, and upon that Account cannot uſe much Exerciſe, and have Reaſon to be cautious how they venture into the Cold Bath; and therefore I have not perfunctorily advanced this Method, where I have already treated of that Caſe, but upon good Grounds; as theſe People cannot well bear any of the ſenſi-

ble Evacuations it is but neceſſary we ſhould have a Recourſe to the Promotion to the Inſenſible One; and perhaps if we knew the true Cauſe of that Diſtemper, it would be found to ariſe in a great part from ſome Lett in that inſenſible Perſpiration, and therefore it would be proper to endeavour the Removal of ſuch an Obſtruction by outward Means, becauſe ſo few Internal Ones are agreeable; and if any one thinks the Breathing, that is cauſed by *Chafing*, too trivial to be called an Evacuation, they may be fully informed out of *Hippocrates* and *Galen*, that they thought it to deſerve that Name, and therefore they diſtinguiſhed one Degree of it for attenuating of groſs Bodies. If therefore this can be brought to appear a ſufficient Evacuation for theſe People, it is certain it is more conducive upon other Accounts; becauſe it raiſes and cheriſhes the Spirits at the ſame Time. Upon this Account of refreſhing the Spirits,

Spirits, the Ancients made it a great part of their Ἀποθεραπία, that is, their Method of refreshing *Athleticks*, after their violent Exercises; and every Old Woman now among us, falls to rubbing the Limbs of any Body that happens to be taken with an Hysteric Fit, for it diverts the Spirits from flowing too much to the Parts affected, and long acting upon the Extremity of those most sensible Fibres of the Skin, must needs agitate the Spirits considerably, and give some Strength likewise to those Parts that are so *Chafed*.

A great deal more might be added on this neglected Subject; but I think I have said enough to prove what I above asserted, *viz.* the exquisite Agreement between the Practice of the Antients and our Theory of the *Cutaneous Parts*; and if this will not encourage any to hope for the like Advantage from the same Methods now in our Days, nothing that I can say more will avail.

Of Bearing COLD.

THE next and laſt *Gymnaſtic* Method I proceed to, is the Uſe of the *Cold Bath*. If any ſhould wonder to find me rank this among the ſeveral Sorts of Exerciſe, they may conſider, that it was ever reputed for one among the Antients, and not without Reaſon; ſince it makes the Spirits recoil, and act with more united Vigour, upon the Subject-matter of the Diſeaſe, and ſo a Cure may be made by them alone, without any medicinal Virtue received through the Pores, and in other outward and topical Applications. This comes up to the Notion of an Exerciſe, becauſe it enables Nature to accompliſh the Work of healing her ſelf.

I ſhall not attempt to account for the Advantages of this Practice, becauſe that has been done already ſo copiouſly by Sir *John Floyer* and Dr.

Dr. *Baynard*, and the World has already begun to experience the good Effects of it; and there are Examples enough every where known, to juſtify the Recourſe to it, in the Caſes to which I apply it; and it is to be hoped now, that Men will begin to conſider the Folly and Miſchief of the too warm Regimen which in Health does often prepare them for Sickneſs, and in Sickneſs does often increaſe the Diſeaſe, and haſten Death; a Regimen which would be much more proper for one that is to have a ſudden Paſſage into a warm Country, than for us who are to prepare ourſelves for the bearing of the Cold; a Thing which we cannot fly from, and therefore ought to reſiſt it; and which is not ſo formidable or dangerous, as for a great while has been thought. The Inhabitants of this Nation formerly went naked, and were more healthy than we are now; and the People of *Canada*, and all the cold Continent behind *Newfoundland*, go much after

the ſame Manner, without any Inconvenience from it, but are rather fortified againſt the Accidents they would be ſubject to, if their Pores were too much opened, and relaxed by too much Warmth; and we may very well diſtinguiſh the rational from the ſavage Part, by as thin a Habit as Decency will permit. It is a ſtrange Thing that People ſhould be fond of ſuppling their Skins, and keeping their Pores too open; as if a Man did not as really perſpire, when there is no ſenſible Moiſture upon the Skin, though not ſo much, as when he is all bedewed with Exhalations, which ſhould not be ſent out in ſo great a Quantity but upon brisk Exerciſe. If Men knew how much Sweat impairs the Skin, and enclines it to wrinkle, as *Sanctorius* tells us in one of his *Aphoriſms*, they would be fully perſuaded, that Nature can make her Diſcharges by finer and better Ways than thoſe which are ſo perceptible, and that Flannel is ſcarce neceſſary or

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convenient on this Side old Age. The nervous Parts of the Skin have certainly a very great Elaſticity, and are capable of being ſtrengthened by good and ſuitable Management, even to a Habit, as well as thoſe of other Parts; and we ſee, that when the Glands of the Skin do throw out a very ſenſible Quantity of Sweat in ſome particular Parts, theſe Parts grow accuſtomed to the Air, or other Moiſture, and receive little or no Hindrance in their Diſcharges from it; as we ſee the Palms of the Hands ſhall ſweat copiouſly, notwithſtanding the external Air immediately ſtriking upon them; and none are more ſtrong and healthy than thoſe who are wont to have their Feet wet without changing their Shoes and Stockings for it. The Stomach, placed in the midſt of the Body, and conſequently exquiſitely warm, is ſo adapted, as to bear large Draughts of the coldeſt Liquor, without the leaſt Damage, unleſs the Body has been extremely heated;

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and though its Office seems to require great and continual Heat, yet it is not obstructed in it, by the Admission of cold Things; nor are its Glands benumbed or constringed, so as to hinder the Secretion of digesting Juices: And can we suppose the Fabric of the Skin less perfect, and exquisite, when by its Position it is to be immediately subject to the Effects of the external Air? Can we think its Vessels are not endued with a Strength sufficient to answer the Force and Weight of the incumbent Air? And its Glands of such a Make, as that the Particles they strain shall be of so fine a Texture, as to pass the Skin, when it seems to us to be too close to permit any Transition? We make but indifferent Use of a very good Theory, that *Sanctorius* has furnished us with, if we give way to these Thoughts, and encourage too frequently the promoting of sensible Perspirations, which, be they in never so small a Degree, are the Effect, of some

of ſome Violence upon Nature, and conſequently not to be compared with the other more even and regular Secretion.

Beſides, we may argue from the Effects of too much Heat, and from the Diſtempers of Hot Countries. To inſtance but in one Diſeaſe, (which when it ſeizes any one among us, their chiefeſt Care is to be ſecured from the Cold) and that is the Cholic, which is the Epidemical Diſtemper of Hot Countries, not of Cold, and ſo common at *Surat*, that about Noon the whole Town ſhall ſmell of *Aſſa Fœtida*, which they mix in moſt of their Diſhes, to preſerve them from that Tormenting Diſtemper, which the Heat of the Air doth not exempt them from, but expoſes them to it, by rarefying the Blood and Humours, and opening their Pores; by which Method I do not doubt but many a one among us has brought an accidental Cholic to

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be habitual; for being ſcared by the firſt Fit, they have endeavoured to ſecure themſelves from another, by theſe very Means which prove moſt likely to bring it on. If any one thinks this ſtrange, let them remember what happened when Muffs were worn univerſally: Some Men were wont to let them hang upon their Bellies for the moſt part; and I have heard a healthy Man complain, that upon leaving off his Muff for a Day or two after ſuch a Cuſtom, he has been griped; from which any one in the World will infer, that the keeping the Part too warm, prepared it for the ill Effect of the Air, and that the ſame may happen in any Part of the whole Body; ſo that it is a Folly for People, in moſt Caſes where the Lungs are not concerned, to nurſe up a Diſtemper, which was at firſt perhaps in a great part owing to a tender Way of Living, and by continuing that Courſe of Life, muſt be rather encreaſed than perfectly rooted out.

out. A great deal more might be urged, if my Scope would permit me, to induce People to believe the good Effects that will follow upon the exerciſing themſelves in bearing *Cold*.

I ſhall proceed next to ſhew, what was the Opinion of the Antients concerning Exerciſe in the Cure of ſeveral Diſtempers, and ſhall collect their Sentiments as briefly as poſſible, that, as in a Sketch, they may appear at one View.

THE

THE

PRACTICE

OF THE

ANTIENTS.

WE find then that much about the Time of *Hippocrates*, the *Gymnaſtic* Method began to be introduced into the Art of Phyſic. Whether it was brought up by the School of the *Cnidians*, or any other Society of Phyſicians, or whether *Herodicus* firſt joined it to the Dietetic, and ſo brought it into Requeſt, I ſhall not undertake to determine; but we find by *Hippocrates*, in his *third* Book *de Dietâ*, *Sect.* 12. that with ſome Sort of Glory he aſſumes to himſelf the Honour of bringing that Method to a Perfection, ſo as to

to be able to distinguish πότερον τὸ σιτίον κρατέει τὸς πόνος, ἢ οἱ πόνοι τὰ σίτια, ἢ μετρίως ἔχει πρὸς ἄλληλα; *Utrum cibus superet labores, aut labores cibos, aut moderatè inter se habeant*; * as he expresses it. Pursuant to this, we find him, in several Places of his Work, recommending several Sorts of Exercises upon proper Occasions; as, *First*, *Friction* or *Chafing*, the Effects of which he explains in his *second* Book *de Diætâ*, *Sect.* 42. And tells us, that as in some Cases it will bring down the Bloatedness of the solid Parts, in other Cases it will incarn and cause an Increase of Flesh, and make the Part thrive: For, says he, *Carnes calefactæ ac siccatæ alimentum in seipsas per venas trahunt, deinde augescunt.*† He advises Walking, of which they had two Sorts, their round and strait Courses. He gives his Opinion of the Ἀναχινήματα, or Prepara-

* Whether Diet has the Advantage of Exercise, or Exercise of Diet, or whether both mutually agree.

† Flesh, when hot and dry, draws a Nourishment to itself through the Veins, and thence increases.

tory

tory Exercises, which served to warm and fit the Wrestlers for the more vehement ones. In some Cases, he advises the Παλὴ, or common Wrestling, and the Ἀκροχείρησις, or Wrestling by the Hands only, without coming close. The Κωρυκυαχία, or the Exercise of the *Corycus*, or the hanging Ball. The Χειρονομίη, a Sort of dextrous and regular Motion of the Hands, and upper Parts of the Body, sometimes after a Military Manner. The Ἀλίνδησις, or rolling in Sand; and once we find mentioned with some Approbation, the Ἤπειροι Ἵπποι, *Equi Indifiniti*, by which I suppose he means Galloping long Courses in the open Field. These various Exercises are more amply described by several Authors, and *Mercurialis* has collected a very good Account of them; they may seem strange to those who do not consider what great Expences the Antients were at in Building Academies, or Places every Way convenient for these Purposes;

Purpoſes; and as odd as ſome of theſe may be thought by us now, they were as commonly practiſed in thoſe Days, as Cupping is now in our *Bagnio's*. And though *Hippocrates* gives his Direction concerning theſe Things, after his uſual Manner, in ſhort Terms; yet it is plain he depended much on them, becauſe he ſo frequently inculcates the Diſtinction of this or that ſort of Exerciſe, to ſuch and ſuch a Diſtemper; and the People of thoſe Times might find greater Benefit from thoſe Exerciſes, than we do now from ſome of ours, which I doubt not are altogether as good; becauſe they applied the Exerciſe to ſuch or ſuch a Medicine as the Phyſician thought fit, which gave it a greater Energy; and after its Operation, had recourſe to another milder Method, to take off the Heat or Diſorder, which might have been cauſed by the Medicine. In theſe Practices they were ſo dextrous and ſucceſsful, that though their Ætiology,

ſtrictly taken, was wrong; yet if a Man diligently attends to their Reaſoning from Effects, he may be ſatisfied, that they were able, by theſe Methods, to do ſome wonderful Cures; and indeed, they ſometimes had ſuch ſurprizing Succeſs, that the abovementioned *Herodicus*, an eminent Maſter of Exerciſes, thought he could cure all Diſtempers by thoſe Means, and went empirically to work upon the Bodies of thoſe who put themſelves under his Care, and was ſo extravagant, as to attempt to cure Fevers by ſuch Methods for which he is ridiculed by *Hippocrates*, in the *Sixth Book* of his *Epidemics*, and the *Third Section*.

As for *Galen*, he follows *Hippocrates* in this, as cloſe as in other Things, and declares his Opinion of the Benefit of Exerciſes, in ſeveral Places. His *Second* Book, *de Sanitate Tuendâ*, is wholly upon the Uſe of the *Strigil*, or the Advantage of Regular

gular *Chafing*. He has wrote a little Tract, *de Parvâ Pillâ*, wherein he recommends an Exercise, by which the Body and Mind are both at the same Time affected. In his Discourse to *Thrasibulus*, which is a Dispute, whether the Preservation of the Health properly belongs to the Art of Physic, or to the Gymnastic Art, he inveighs against the *Athletic*, and other violent Practices of the *Gymnasium*, but approves of the more moderate Exercises, as subservient to the Ends of a Physician, and consequently Part of that Art.

The other *Greek* Writers speak much the same Thing, and the Sense of most of them, in this Matter, is contracted in *Oribasius*'s Collections: I shall only take Notice, that they relied much on Exercise in the Cure of the *Dropsy*, wherein we almost totally neglect it. *Porrò motus si quid aliud* (says *Trallian*, one of the latest of them) *Hydropicis conducit præcipuè*

qui fit per mare, equum, & lecticam; iis autem qui viribus constant, etiam itio est utilissima; * which is no more than what *Hippocrates* has advised before, in his *de internis Affection. Sect.* 28. He orders for one that has a Dropsy ταλαυπωρέεσθω περιόδοισι πολλῇσι δὶ ἡμέρης, *Laboret circuitus multos de die.* † And he makes use of the same Word in his Epidemics, and almost always when he speaks of the Regimen of a Dropsical Person, implying that though it be a Labour for such People to move, yet they must undergo it. And this is so much the Sense of *Hippocrates*, that Monsieur *Spon* has collected it into one of the new *Aphorisms*, which he has drawn out of his Works. *Celsus* says of this Case, *Concutiendum multâ gestatione corpus est*; ‖ and in another Place, *Facilius in servis quàm in liberis*

* Certainly Motion, if any Thing, is of Service to Dropsical Persons, especially that at Sea, on Horseback, or in a Sedan; and to them who are able, even Walking is very useful.

† Let him take many Turns every Day.

‖ The Body should be shaken with being much carried.

beris

beris tollitur, quia cum desideret famem, sitim, mille alia tædia, longamque patientiam, promptiùs his succuritur, qui faciliùs coguntur, quam quibus inutilis libertas est. * I have made Choice of these Citations, that I may not be thought to have applied the Use of Exercise to the Cure of the Dropsy, without Precedent; and if the Antients in their Practice found the good Effects of it, we have much more Reason to expect greater Advantage from such Measures, since we have a Medicine we use in this Case, which seems particularly to demand it; I mean the Chalybeate, of which I have already spoke elsewhere.

But to return to my former Design. Not only the *Greeks*, but the *Latin* Writers also, are full of these Methods. The *Romans* rather ex-

* It is with less Difficulty removed in Servants than in Free-Men, because when it induces Hunger, Thirst, and a thousand other Grievances, requiring long Patience, those are more readily relieved, who are more easily compelled, than those whose Liberty is of no Service to them.

ceeded, than came short of the *Greeks*, in the Prosecution of *Gymnastic* Courses; and *Asclepiades*, who lived in the Time of *Pompey* the Great, was the Man who brought them into the most Universal Request. He called Exercises *the common Aids of Physic*, and wrote a Treatise, *De Frictione & Gestatione*, which is mentioned by *Celsus* in his Chapter *de Frictione*, but the Book is lost. He carried these Notions so far, that he invented the *Lecti Pensiles*, or Hanging Beds, that the Sick might be rocked to Sleep; which took so much at that Time, that they came afterwards to make these Beds of Silver, and they were a great Part of the Luxury of that People. He had so many particular Ways to make Physic agreeable, understood so well the Τὸ βέλτιον of his Profession, was so exquisite in the Invention of Exercises to supply the Place of much Physic, that perhaps no Man in any Age ever had the Happiness to obtain so general an Applause,

plauſe, and *Pliny* ſays, he by theſe Means made himſelf the Delight of Mankind.

About his Time the *Roman* Phyſicians ſent the conſumptive Patients to *Alexandria* in *Egypt*, and with very good Succeſs, as we find by both the *Plinys*. This was done partly for the Change of Air, but chiefly for the Sake of Exerciſe by the Motion of the Ship; and therefore *Celſus* ſays, *Si vera Phthiſis eſt, opus eſt longâ Navigatione* * : And a little after he makes *Vehiculum & Navis* to be two of the chiefeſt Remedies; and I am apt to believe they were the more inclined to make uſe of the Sea-carriage, as an Exerciſe, for the ſake of the Vomiting, which happens at the Beginning of it, that they might thereby ſupply their Want of gentle Emeticks, which at Times are ſo beneficial in that Diſtemper, in

* If it be a true Conſumption, a long Voyage is neceſſary.

which ſcarce any of the Emetics which they then knew, can be uſed with Safety, and it was a great Part of their Induſtry and Sagacity to make good what they wanted in Pharmacy by other Means. As for the other more common Exerciſes, they were daily practiſed; as it is very manifeſt from *Celſus*, *Cœlius Aurelianus*, *Theodorus*, *Priſcianus*, and the reſt of the *Latin* Phyſicians. And we do not want Inſtances of the Cures wrought by theſe Means. *Suetonius* tells us, that *Germanicus* was cured of a *Crurum Gracilitas*, as he expreſſes it, I ſuppoſe he means an *Atrophy*, by Riding; and *Plutarch*, in the Life of *Tully*, gives us an Account of his Infirmneſs, and that he recovered a great Meaſure of Health by Travelling, and exceſſive Diligence in Rubbing and *Chafing* his Body; and he himſelf in his *Brutus*, *ſeu de claris Oratoribus*, relates his Caſe, that he was ſo weak that his Friends and Phyſicians adviſed him to leave off Pleading, which

ſtruck

ſtruck him ſo, that he thought he would undergo any Fatigue, rather than loſe the Glory of his Profeſſion, and ſo betook himſelf to Travelling, which with other regular Courſes brought him to his Health again. *Pliny, Lib.* 31. *Cap.* 6. tells us, *Annæus Gallio*, who had been Conſul, was cured of a Conſumption by a Sea Voyage; and *Galen* gives us ſuch Accounts of the good Effects of particular Exerciſes, and all People ſo unanimouſly applied themſelves with Patience and Reſolution to theſe Practices, that it cannot be ſuppoſed but they muſt have been able to produce great and good Effects.

If any one ſhould aſk me, how it comes to paſs that Riding, which I have ſubſtituted as equivalent to any or all the Exerciſes of the Antients, in the Caſe of Sickneſs, was ſo little regarded by their Phyſicians, but other leſs valuable Exerciſes inſiſted on; it may be replied, that the Antients

tients could not recommend Riding to weak People, becauſe of their Manner of Riding. They had not the ſame Convenience as we have; for in thoſe Days they rode without Stirrups, which muſt needs be tireſome to weak Perſons. We find by comparing of Medals, that the Stirrup was an Invention of a much later Date, than any of the Authors I have quoted, I think by about ſeven hundred Years; ſo that Riding was only an Exerciſe for healthy and ſtrong Men: Beſides, Horſes were not ſo common in the *Levant*, or in *Italy*, as they are with us; they were reſerved for military Men, or at leaſt for Men of plentiful Fortunes, and the Aſs and the Mule ſerved for common Carriage. The Horſe was a formidable Creature to People that were not accuſtomed to him, and eſpecially to weak Perſons. We ſee ſuch a jolly Fellow as *Martial* could adviſe his Friend *Priſcus*, to have a Care how he hunted, *Lib.* xii. *Epig.* 14.

Par-

Parcius utaris, moneo, rapiente veredo
Priſce, nec in lepores tam violenter
*eas.**

And in the Cloſe of the Epigram,

Quid te fræna juvant temeraria! ſæpiùs illis,
Priſce, datum eſt equitem rumpere, quam leporem. †

And that this Humour ſtill remains in thoſe Countries, though we have a better Way of Riding, is evident from Dr. *Baglivi*, who tells us in the *Corollaries* of the *8th* Chapter of his *Firſt* Book, *de Fib. Motrice*, That he cured two Hypochondriacal Perſons, *hominem nobilem ac alium divitem*, a Gentleman and another rich Man, that he ſays were deſperately ill, by

* More moderately uſe the Running-Horſe,
Nor after Hares ſo ſwiftly urge thy Courſe.

† Of Reinleſs Steeds it oft'ner is the Share
To break the Hunter's Neck, than kill the Hare.

Riding

Riding on Asses in the Country Air; and I believe all will agree to think they were desperately ill, who could dispense with the Ass-trot, when their Circumstances would have afforded them the Carriage of a better Creature. The *Italians* plainly discover, likewise, how little they are addicted to Horsemanship, in that Proverb of theirs, which says, *That a galloping Horse is an open Sepulchre*; and according to this Opinion they manage their Horse-Races at *Florence*, for they make their Horses run without Riders upon them, something after the manner of a Paddock-Course; and to make them run the faster, they clap a Saddle upon them covered with a sort of Tinsy Stuff, that may make a fluttering with the Motion of the Horse, and fright him that he may run the faster; and instead of Stirrups there hang down Straps from the Saddle, at the End of which, there are Balls full of sharp Spikes, which leap up and down, and prick the Horse as he

he runs. This ridiculous Way of Running their Horſes, ſhews how great is the Prevalence of that habitual Timorouſneſs, which keeps them from the Enjoyment of the beſt and moſt uſeful Sort of Riding, as the Antients could diſtinguiſh very well; as we find by *Oribaſius*, in his Chapter *de Equitatione*, who, after he has ſaid, that Riding ſlowly was tireſome, (which was for want of Stirrups) he goes on to tell you: *Si vehementer impellatur (viz.* Equus) *quamvis totum corpus laborioſè concutiat, tamen aliquid utilitatis affert, ſiquidem magis quam omnes aliæ exercitationes, corpus & præſertim ſtomachum firmat, & ſenſuum inſtrumenta purgat eaque reddit acutiora.** This is a ſufficient *Encomium* of Riding, coming from the Mouth of one of the Antients, who relied ſo much upon other Exerciſes,

* When a Horſe is put on the Stretch, though he violently ſhakes the whole Body, yet this brings ſome Advantage, for it ſtrengthens the animal Syſtem, eſpecially the Stomach, and purges and ſharpens the Organs of the Senſes, beyond all other Exerciſes.

tho'

though we in these Northern Parts want no Recommendation from them, of a Thing so much experienced by ourselves; only we slight and neglect this Advantage, as we do many others, because it is common.

I have now, with sufficient Brevity, considered how much the Antients depended on the Assistance of Exercises in their Practice; and I leave it to any one, that is not prejudiced, to judge whether this may not pass for one Reason, why they cured so well with so bad a Theory, and such indifferent Materials; when we, with our Circulation and splendid Pharmacy, are not perhaps able to out-do them proportionably to our larger Acquisition of Knowledge: I say, I think this may be one Reason, for I know there is another may be alledged likewise, and I think I speak without any undue Aggravation.

The

The Power of Exercises used at proper Seasons, and with great and exact Patience, must needs be very great; and if it be true, that in the *Roman* Commonwealth, there was no professed Physician for the first five hundred Years, there is no Way to account for it but by their incredible Temperance, and Variety of Exercises. The few chronical Distempers they had among them, were, in all likelihood, for the most Part subsequent to acute Distempers, which no Temperance can always prevent; and the little vegetable Physic, which they could not but know, with their resolute and indefatigable Application to some of their Exercises, might suffice to help them to get clear of them. This may perhaps by some be thought rather a Gloss than an Argument, who do not duly consider their wonderful Patience in this Respect. The *Pletherismus*, and *Pityliſmus*, two odd uncouth Exercises mentioned by *Galen*, are sufficient to con-

convince any Man, that they that would heartily drudge at them in the Middle of the *Stadium*, would do any Thing that was possible to recover their Health, and might expect the very utmost Benefit that could be obtained from the various Motion of the Whole, or any Part of the Body.

I will grant that they carried these Things too far; the whole Education of the *Athletæ* was blameable. I will grant likewise, that they were too nice in the Exercises for the Preservation of Health. I cannot admire *Pliny*'s Course of Life which he gives us an Account of in the *thirty-sixth Epistle* of his *Ninth* Book. *Ubi hora quarta vel quinta (neque enim certum dimensumque tempus) ut dies suasit, in xystum me, vel cryptoporticum confero, reliqua meditor & dicto, vehiculum ascendo: Ibi quoque idem quod ambulans, aut jacens, durat intensio, mutatione ipsa refacta, paulum redormio, deinde ambulo, mox orationem Græcam*

cam Latinàmve clarè & intentè, non tam vocis causâ, quam ſtomachi lego, pariter tamen & illa firmatur; iterum ambulo, ungor, exerceor, lavor. * Nor can I approve of *Spurinna*'s abundant Regularity, as *Pliny* relates it. In his *firſt* Epiſtle of his *third* Book, he tells us, thus *Spurinna* managed himſelf: *Ut manè lectulo contineretur, hora ſecunda indueretur, ambularetque millia paſſuum tria; mox legeret, vel colloqueretur; deinde conſideret, tum vehiculum aſcenderet; peractiſque ita ſeptem millibus paſſuum, iterum ambularet mille, iterum reſideret, vel ſe cubiculo aut ſtylo redderet: ubi hora balneì nunciata foret, (quæ erat hyeme nona, æſtate octava) in ſole, ſi caruiſſet vento, ambuleret nudus; dein pila moveretur vehementer, & diu; poſtmo-*

* When till the fourth or fifth Hour (for I am not always exact in my Time) as the Day permits, I have conferred in the Gallery or Cloyſter, the reſt I meditate and dictate, and aſcend my Vehicle; where, as well as walking or lying, the Tenſion continues, being relieved by the Change. I ſleep a little; then walk; then read a *Greek* or *Latin* Oration clearly and diſtinctly, not ſo much on account of my Voice, as of my Stomach, though that alſo is greatly aſſiſted by it. I walk again, am anointed, perform my Exerciſe, and am waſhed.

dùm lotus accumberet, & pauliſper cibum differret. * This is a great deal too much; this is over-doing; Life is not worth ſuch anxious Regularity: A generous Negligence is much more preferable in a State of Health; but if a Man happens to be ſeized with a Diſtemper of ſuch a Nature, that Exerciſe is abſolutely neceſſary to the Removal of it, he would be wanting to himſelf, and very much to be blamed, if he ſhould think any Fatigue too great to be undergone for the Sake of a Recovery; and I fancy there's ſcarce any Man in this Caſe, but would take Pains enough, provided he thought they would not be in vain, which moſt People are now apt to ſuppoſe, becauſe the World

* He roſe early; dreſſed himſelf at the ſecond Hour; walked three Miles; then read or converſed; then meditated; then rode ſeven Miles, and walked one; then ſat or lay down. When Bathing-time came (which was at the ninth Hour in Winter, and the eighth in Summer) he walked in the Sun naked, if there was no Wind; then exerciſed himſelf well at the Javelin; after which, being waſhed, he ſat down, and waited ſome Time for Supper.

has

has loſt the Senſe of the Efficacy of Exerciſe, ſince the *Goths* over-run the Southern Nations of *Europe*, and aboliſhed and ſuppreſſed many of their Cuſtoms, that they might the eaſier introduce their own. So that in this Reſpect we are in oppoſite Extreams; if they proſecuted theſe Meaſures too much, we do too little; and I am very ſenſible how difficult a Thing it is, with the beſt of Arguments, to influence thoſe who are propenſe to the contrary of what you propoſe. And we are ſo habituated to other Methods and other Expectations; have ſo many Conveniencies for Support and Palliation under a Sickneſs, that moſt People are ſupinely content rather to rub on in a ſickly Condition, that does not carry the greateſt Danger with it, than reſolutely to endeavour, by vigorous Means, to be quite delivered from it. And if it be a Diſtemper that threatens immediate Peril, theſe Means are preſently thought too trivial to have

any Weight in the Cure, and People can with more Eaſe deſpair of Help, than ſtruggle with Pain, iin Hope of an uncertain Cure; ſo that in ſome Caſes, it may be very well ſaid of the Wiſe, the Rich, the Valiant, and the Mighty, as was formerly ſaid of one of King *David*'s Generals, who, becauſe he was killed upon a Surprize, (which yet no human Precaution can always prevent) was lamented with that ſevere *Epicedium*, *Died* ABNER *as a* FOOL *dieth.*

Of the ITCH, *and other Cutaneous Eruptions*, &c.

The AUTHOR'S CASE.

I Did not design, either when I begun or when I ended this Treatise, to add the following Account of my own Distemper, which gave the unhappy Occasion of many of these Observations; both because it is no new Thing for nervous Cases to vary extremely in their anomalous Symptoms, and because the Rise of the Distemper was eminently owing to my own Rashness and Folly: But having since been importuned by some of my Friends to make it publick, I have been the more easily prevailed with so to do, because I perceived there scarce ever was any Instance, either among the Antients or in our Days, which does so palpably illustrate the Power of my Subject.

My

My Diſtemper was cauſed thus: I happened ſeveral Years ago to catch a certain cutaneous Infection, more troubleſome than dangerous, and which I might eaſily have got rid of, if I had had but ſo much Prudence or Patience as to have ſubmitted to the common, though not very agreeable, Method of Cure; but I muſt needs take to a more cleanly, but deſperate Courſe, by making an Application to my Skin of a Subſtance well charged with a dangerous Mineral, and which I uſed to ſuch a Time, and after ſo extremely raſh a Manner, as I believe never one did before me: I wore it for ſeveral Months by Times, keeping it on till the Humour diſappeared, and then leaving it off till it broke out again: Thus I did till I began to conſider that this would not laſt always, and ſo I quite laid it aſide. But the Miſchief was begun, though I was not aware of it; for about a Month after I had left off that pernicious Practice, I waked one Morning

ing with an univerſal Giddineſs, and a little Time after, I found ſeveral Convulſions begin to come upon me, not only ſlight ones, in the Capillary Arteries of my Eyes and other Parts, but ſome deeper; as ſometimes I ſhould have one of my Hands drawn in, and my Fingers brought to the Palm of my Hand involuntarily. When I found Things thus, knowing what I had done, I was not a little terrified, as any one may imagine; but by applying to a good Phyſician, by the Help of Bleeding and other proper Means, the Severity of the Symptoms went off, and I remained only with a Giddineſs, which was very troubleſome, but notwithſtanding which, I might be ſaid to be in pretty good Health, as having a good Habit of Body, and being more ſtrong and robuſt than many People that are free from ſuch an Inconvenience. Thus I continued for ſeveral Years without any great Alteration happening, except that once upon

Drinking the *Bath* Waters too long, that vertiginous Rotation was so increased, that I was laid up for a Month with it, being scarce able to go about without staggering like a drunken Man. This, considering the Strength I had notwithstanding, made it reasonable to suspect, as most that I consulted did, that there might be some Mercurial Particles lodged in some excretory Ducts of my Brain: But this Extremity abated, and I remained healthy under that Giddiness for several Years, till happening once to be more indispos'd than usually, upon the taking of a Chalybeate, the Humour struck deeper into the Nerves of the Pectoral Muscles, so that I found my Shoulders sometimes begin to be contracted involuntarily, and upon walking, I found a Shortness of Breath, which I could plainly discern was caused *ab extra*, that is, by the preternatural Presſure of those Muscles upon my Breast, which I have sometimes resisted even so far, when

it

it has happened to come upon me in the Streets, before I could get to a Houſe that I knew, that it has made my Eyes flaſh, and has brought other Epileptic Symptoms upon me, inſomuch, that I have been forced to take into a Shop, and deſire leave to reſt me for a Time. Theſe Things continued on me a Year or more, during which Time, if I had then known the Prevalency of Riding, I might have prevented a long Scene of Sickneſs; for declining under theſe Spaſms of my Breaſt, I was at length quite confined to my Home, for near Three Months, all the while growing worſe and worſe, in Spite of the Power of any Medicines I took; when it happened that I was caſually directed to the Uſe of Riding, by the great Alteration I found in me, upon being one Day carried out in a Coach about a Quarter of a Mile, when I was in that low Condition. That made me reflect on ſome of Dr. *Sydenham*'s Notions, which, like others, I had before

before ſlighted and diſregarded, and I determined to try what Riding would do; in order to which I removed to *Hampſtead* for the Conveniency, where I rode at leaſt twice a Day for the Space of ſeven Weeks, without ſo much as intermitting one Day: And I had Encouragement enough to keep cloſe to it; for I found as manifeſt a Progreſs in my Recovery, as ever was diſcerned in any Thing that is either natural or artificial; and I cannot here omit one Thing very remarkable, and which gave me the greateſt Aſſurance of Succeſs, and which ſhews beyond Contradiction, how peculiar this Exerciſe is to Caſes of the Nerves: After I began to ride, I found conſtantly upon the Uſe of that Exerciſe, a Tingling in the Ends of my Fingers, which was accompanied with a Senſe of a gentle glowing Heat; and, as I grew ſtronger, and perſiſted in thoſe Means, I perceived this Senſation proceed farther, for then I felt it in the

Crown

Crown of my Head, and at length in my Tongue, in my Eyes, and at laſt all over my Body. This I acquainted my Phyſician with, who thought it a certain Pledge of my Recovery, as being aſſured that it was cauſed by the Spirits recovering the Paſſage of the Nerves as in a State of Health, and ſo it proved; for as they paſſed farther and farther in the ſame manner, the Senſe extended it ſelf to my Waiſt, where I ſhould have, after Riding, a Senſe of Tingling and Heat, as ſtrong as if I had expoſed my Breaſt to the Sun, or poured warm Water upon it. Any one may imagine what a Pleaſure this muſt needs be to one in my Circumſtances, to find myſelf, as it were, *Renaſci*, and all the Parts of my Body gradually receive a kind of New Life. By this it is plain, how much I was relaxed before, and how agreeable to the Nature of the Nerves that moſt excellent Exerciſe is. This *Phænomenon* has given me very ſerious

Re-

Reflections, when I have known ſome who have ſtood almoſt in as much need of the ſame Meaſures as myſelf, though their Indiſpoſitions have riſen from different Cauſes, and in whom, in all likelihood, the ſame Method of Riding would have produced ſome of the ſame hopeful Symptoms; I ſay, it has given me ſerious and troubleſome Reflections, when upon ſuch Occaſions, I have not thought it proper to recommend the ſame Means, or ſhew the Reaſon why I would recommend them, as being ſure that if I did they would be rejected with Deriſion. So that I have often, with ſome Regret, admired the Incongruity of the Circumſtances of Human Life; how little Reaſon Man has to be proud, notwithſtanding his Wiſdom and Council, when even in the greateſt Concerns of his Life, Cuſtom, Mode, Fancy, and many other Circumſtances, may ſo invelop him with Prejudice, that it may ſo happen, that in ſome Caſes of Diſtreſs, one

Man

Man may be morally certain of what will help another, and yet it may be the moſt abſurd Thing in the World to diſcloſe it to him, and impoſſible to convince him if he ſhould. I have the more amply related this unuſual Circumſtance, becauſe it ſeems to me to illuſtrate, above any thing whatſoever, the Influence of Riding on the Nerves or Solid Parts of the Body; and as ſtrange and unheard-of a Symptom as it may ſeem to ſome, I can aver it is a moſt ſolemn Truth, and what I had frequent and reiterated Occaſions to obſerve.

After I had by theſe Means recovered a good Meaſure of Health, I enjoyed it about a Year and a half, by the help of Riding at due Intervals; and I was pretty ſtrong, and able to make conſiderable Journeys, which my Affairs then required. But in thoſe Journeys, I was ſo unfortunate, as to abuſe that moſt excellent Expedient that I had received ſo much good from; for, thinking my ſelf ſtronger than I really was, and

riding

riding long Journeys beyond my Strength, I was took on a ſudden, and in the midſt of a Journey, with the ſtrangeſt ſort of *Deliquium* that perhaps ever was heard off, in which I was forced to drink ſuch Quantities of Spirituous Liquors, as at another Time would have made me more than ordinarily drunk, which then could ſcarce keep Life in me: To theſe ſort of Fits, after ſome Time, was added a *Diarrhæa* of a peculiar and ſingular Kind, which was attended with a Nauſeouſneſs and Inclination to vomit, more than uſual in that Caſe; and when the *Diarrhæa* at any Time happened to be a little more violent than ordinarily, a ſpontaneous Vomiting enſued, as violent as if I had taken a ſtrong Emetic; and what is remarkable, thoſe Nights after my Vomiting, I ſweat to that degree, as to make my Shirt and Sheet as wet, as if they had been dipped in Water; upon which, inſtead of being weakened, I was refreſhed, and freed from the

the greater Severity of these Symptoms for some Days; which plainly shewed how pernicious that Psoradic Salt was, which the Mercurial Particles has repelled, and intimately mixed in my Blood. Thus I had three Calamities upon me at once; a Flux, a Vomiting, and the *Deliquiums* I spoke of before; the last of which had something so incredible in them, that though most severely true, and known to several in this City, yet I shall forbear to relate it in this Place, lest I should be thought to exceed the Truth, by telling that which scarce ever had a Parallel; I shall only say, that the Gripes and Vomiting were comparatively a Pleasure to this. I do not speak in Heat, but seriously and calmly, that the Vomiting, though so frequent and severe, was desirable, if compared with these most strange Faintings; which were so tormenting and insupportable, that if I had been stabbed, or had had my Flesh cut with Knives, I am certain,

I could much easier have borne it. Under this Complication of Misery, I was denyed likewise the Ease, which is to be obtained by *Laudanum*, which I was prohibited by the Nature of my Circumstances, and by very good Advice directed to abstain from it. And as for Emetics, there was no using of them for other Reasons; so that the Business was left wholly to Styptics, which not putting the least Stop to my Distemper, I resolved to betake myself to Riding again, having rested so long, and would try if using it moderately and frequently might not keep up my Spirits, as formerly it had done, and it proved according to my Hopes; for by diligent and fervent Application to these Means, I made a shift to support myself, and keep Things in an *Æquilibrium*, under these pressing Circumstances; insomuch that I held out, even under such Severities as I have related, no less a Time than a Year and Nine Months, when at length

length theſe Evils gained upon me, and my Vomitings were ſo frequent, and incredibly violent, that they took away the Uſe of my Limbs, when I was forced to be lifted every Time upon my Horſe, that I might continue my Riding, though it were but to gain a little Periodical Eaſe; till that Seizure on my Limbs increaſing, I was confined to my Chamber, my Legs and Thighs ſwell'd, and in the Opinion of three Phyſicians, whoſe Aſſiſtance I then had, I was very near the End of this (as it was literally to me a) tedious *Journey* of *Life*: When it pleaſed God, that in this Extremity, one of thoſe Phyſicians was ſo happy, as to direct me to a mild chymical Medicine, too ſeldom uſed for that Intent, which ſtopped my Vomiting, and created a ſudden and ſurprizing Change in me; the Swelling of my Legs went off in leſs than three Weeks, and in about ſix Weeks Time, from that Emaciated Condition, I was as Fleſhy, as

a perfect State of Health. By this it is plain, that the great Stress of Vomiting threw off the Humour, and that the Swellings of my Legs was in part, if not altogether, Critical; and that the Habituating myself so very much to Riding, did enable Nature to throw off the Humour that Way, and support her under the Shock of those numerous Vomitings. After this, by the Use of Chalybeates, taken for a great while together, and with Riding upon it, I recovered as good an Appetite and Digestion, as I had before these Vomitings came upon me, and my Flux entirely stopped, and for two Years after, I thank God, I lived an easy and happy Life.

Thus I have given a succinct and true Account of a long and severe Distemper, which it has pleased Almighty God to lay upon me: By which it is plain, that as some Men are distinguished by Riches, Honours, and the like; others may be as remarkable

markable in the Degrees of their Affliction and Anguiſh, and may be forced to paſs not only Days, but Years, of that which we call Life, after ſuch a Manner, that if it were not for higher Conſiderations, it would be far better not to be. That in the very beſt of a Man's Years, in the Time of Hopes, Proſpects, and Advantages, a Man may be ſo wretched as to be debarred the Capacity of making uſe of them, and in a ſenſe buried alive.

But ſince I have offered the World a Relation of my Diſtemper, I ſhall make bold to take Notice of two or three Things obſervable in it, which may perhaps be of uſe to ſome, though the very ſame Diſtemper I hope will never be the Lot of any one. And this the rather, becauſe thoſe Remarks are agreeable to my Subject.

Firſt then, I think it is very clear, from the Circumſtances of my Caſe,

that where Indications ariſe which run counter to one another, which every one knows is the worſt of Difficulties a Phyſician meets with; in ſuch an Emergency, nothing can be ſo likely to ballance between them, as the having recourſe to ſome proper Exerciſe, if poſſible; for it is hard but it will ſuit with one of thoſe Circumſtances, and not improbable, that it will give Help in both.

Secondly, From the Ceſſation of my Gripes as ſoon as ever I got on Horſeback, I am convinced that Pain may be very much obviated or mitigated by the Motion of the Body, that is, by thoſe Means a Man may make a ſhift to ſit looſe from it. It was a Piece of Extravagant Nonſenſe in the Stoics, to pretend to reaſon with Pain, and account it no Evil; a Man might as well pretend to fence againſt Hunger with Reſolution, and be accounted blameable for ſtarving through Want of Victuals. Undoubtedly

edly Pain is the greateſt of Evils to the Body, and that which we cannot but endeavour to free ourſelves from; but till that can be done, it will be a Happineſs, if we can ſo manage Things, as to perceive leſs of it, or, as I ſaïd before, ſit looſe from it; and that I think may certainly be obtained from the Motion of the Individual of ſuch or ſuch a kind as the Pain will beſt admit of. Not only Thought, but the Perception of a Pain, may be in ſome Meaſure interrupted by a ſwift Motion, for that Perception cannot ſtrike ſo ſtrong at ſuch a Time: A Man that ſhould ſet himſelf to muſe on a full Gallop, would think but very incoherently; and if Thought itſelf may be thus broke off, certainly the Senſation of Pain, which can be no quicker than Thought, may be likewiſe happily interrupted, and rendered more dull. Theſe Conſiderations would be of real Service to Perſons afflicted with ſcorbutic Pains, if they could induce them to a reſo-

lute Practice of Riding; for all those Pains in the Shoulders, Back, or Hips would gradually abate in the Time of that Exercise, as well as by the Habit of it, the Cause would be removed. But moreover there are other sorts of Gestation or Voiture, that are suitable with the keenest Pains, as the Motion of a Boat, a Litter, a Chair, a Swing, and the like: In these there are no *Motus Contrarietas*, as Dr. *Sydenham* calls it, no Jolting, which in some Cases, as in the Gout, is not tolerable; but they may be applied to the severest Cases, and I doubt not would sooth the Spirits, and give great Relief. And here I cannot but think that a good Mechanic might invent some Machine, after the Manner of the *Petaurus*, or the great Swing of the Antients, which might be of the greatest Service to People in the Extremities of the Gout, by diverting the Sensation, and turning the Edge of the Pain. A Man that has been laid up for several Weeks,

Weeks, would certainly find by such a Motion as great an Alteration, as one who has been confined to his Bed for some Time does upon his first getting up, which is very great; and certainly if the *Romans*, out of Luxury and Wantonness, could be swung to Sleep in Hanging-Beds of Silver, it may be allowed, that a Person in Torment may use the same Means to obtain Ease. I do not know why a Motion upon a Round should not do some Service in this Case, for there would be a Sort of Sickness in the Stomach, caused by the Rotation, which would withdraw the Spirits from the Place of the Pain; and moreover undoubtedly dispose to Sleep. These Things cannot be thought extravagant, if they can suffice to give any the least Ease to Men under such Pains, as those of the Gout, when the *Carnificina* lasts so long, as to exceed in some Measure all human Patience; when *Non rectius podagræ quam iracundiæ paroxysmus omnis dici*

poteſt, * as Dr. *Sydenham*, who knew too well what it was, ſays of it; I ſay, in ſuch Extremities, nothing ought to be thought ridiculous that can afford the leaſt Eaſe. I could ſay much more on this Subject; I could name a very worthy Gentleman, who not long ago had ſuch an odd Sort of a Cholic, that he found nothing would relieve him in the Fits of it, ſo much as lying with his Head downward; which Poſture proved always ſo advantageous to him, that he cauſed a Kind of Frame to be made, to which he cauſed himſelf to be faſtened with Bolts, and then his Servants were to turn him with his Head downwards; after which Manner he hung till his Pain went off: And I hope none will ſay it was unbecoming a grave and wiſe Man, to make uſe of ſuch odd Means to get rid of an unſupportable Pain. But I have perhaps already ſaid more than

* When it looks as much like a Fit of Anger, as a Fit of the Gout.

will

will be reliſhed by ſome of thoſe Gentlemen, who are ſo happy as to be really ignorant, or to have but very ſlight and imperfect Notions of the Nature of Pain; and before they cenſure me, they would do well to peruſe Mr. *Collier*'s excellent Eſſay upon Pain; where they will find ſuch an Account of it, and ſuch Inſtances of the Behaviour of healthy and ſtrong Men under it, that they will the more eaſily admit, that for the Sick and Infirm, it may be in ſome Meaſure feaſible to avoid, as it were, the Senſations of Pain, and, as much as can be, ſit looſe from it.

The next and laſt Thing which I ſhall take notice of, in my Diſtemper, is the Frequency of thoſe Vomitings; and that notwithſtanding they laſted ſo long on me, I received no Harm from them. It is a great Misfortune in the Buſineſs of a Phyſician, that he finds ſo many People averſe to that Sort of Phyſic, whereby he

he is compelled to profecute a Cure by more uncertain and inefficacious Means; whereas if thoſe Perſons did but conſider, they might eaſily find Arguments to convince them, that there is no ſuch Danger as they apprehend, in the Uſe of moderate Emetics, where there is no *Mala Conformatio*, nothing in the Make of the Breaſt that forbids it. They may conſider that the Vomiting which comes upon going to Sea, though it laſts ſometimes two or three Days together, and all the Time ſeems as violent as that we procure by our Emetics, yet it never hurts any one, and does not ſo much weaken thoſe who have undergone it. I know two Gentlemen who were ſick all the Time of their being upon the Sea, one of them all the Time of his Paſſage to and from the *Weſt-Indies*, and yet they received no Hurt by it. And I do not know but I myſelf have vomited as much as any ten Men living, and yet am not in the leaſt hurt by it. And we

are

are furniſhed with Medicines, ſo gentle and commendable, that they may be repeated at reaſonable Intervals, without the leaſt Danger of any ill Conſequence.

From theſe Conſiderations of the great Εὐροΐα with which we bear Vomiting, though it ſeems ſo troubleſome while it laſts; I am convinced that it may be accounted for after the ſame Manner as Gymnaſtic Effects are; beſides that of the ariſing of the Pulſe upon the Stimulating and Irritation of the Fibres of the Stomach, and the exceſſive Preſſure and Shock of the Glands of ſeveral Parts, with the other *Phænomena* of Vomiting, ſhew that it does partake of the Nature of an Exerciſe; and it is a great Happineſs of the Individual, that the Author of Nature has allotted ſuch ſecondary Uſes of the Stomach, Diaphragm, and other Parts imployed in Vomiting, that they ſhould not only ſerve to throw up what is diſagreeable, but

but ſtrengthen the whole Oeconomy in that very Act. And here if it be allowed, that the Irritation of the Ventricle does raiſe and ſtrengthen ſo much, I cannot but think I may venture to propoſe, as worthy the Conſideration of the beſt Judges of theſe Matters, whether when we uſe Emetics, we ought to reſt our Expectations upon a few momentary Efforts, when we ſee Nature will bear the carrying on of the ſame Meaſures ſo much longer; that is, whether it would not be more expedient in ſome Caſes, to give our ſafe and gentle Emetics in leſſer Quantities than we do, *viz.* ſo as to make the Perſon ſick, but not to a Degree ſufficient to make him throw up the Contents of his Stomach; and when that Quantity of the Medicine has paſſed off after that manner like an Alterative, to repeat the ſame Doſe, and ſo continue on that Sickneſs for ſeveral Hours, without raiſing it to that Degree, as to force the Perſon to vomit

above

above once or twice in all the Time. This, I ſay, I think is worth Conſideration, and may be of ſingular Advantage in ſome Caſes of a Conſumption, and in Hyſteric Caſes, when we do not give Vomits to cleanſe the Stomach only; for by this Means we can elevate Nature very much, and procure a juſt *Diaphoreſis*, when perhaps by the beſt of Cordials we may only create a Colliquation; and after this manner the Springs will be wound up more gradually; when if the Emetic paſſes off with ſtrong Efforts, and very quick, after the uſual manner, we give Nature only a Wrench, the Effects of which are ſoon over. I would not be here underſtood, as if I would put this in Practice; I do not pretend to Authority ſufficient for ſuch Innovations, I only preſume to offer theſe Things, by Way of Problem; and one of my Stature may ſometimes happen to ſtart a Hint, which thoſe who are taller in Wiſdom and Underſtanding

ing may cultivate and improve to Perfection.

Theſe are ſome of the Thoughts which the Severities of a moſt tedious Diſtemper have ſuggeſted to me, which if they can be of any Uſe, to help to guide others to that which may deliver them from their Calamities, it would be a great Satisfaction and Recompence to me for my Pain, to perceive that it has conduced to another's Eaſe. But if theſe Speculations ſhall not be worthy to have ſuch an Effect, I hope I ſhall be pardoned upon the Account of my good Intentions; eſpecially ſeeing I am not ſingular, but have ſo very many Companions of thoſe who have troubled the World with Things of little or no Moment.

FINIS.